

AP - 111

SWMUs No. 1 (Aeration
Basin) & No. 14 (Old API
Separator)

Investigation Report (3)

August 2015

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 1:15:00 PM

Lab ID: 1207900-008

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 7:12:30 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 7:12:30 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 7:12:30 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 7:12:30 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 1:15:00 PM

Lab ID: 1207900-008

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 7:12:30 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 7:12:30 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 7:12:30 PM
Surr: 1,2-Dichloroethane-d4	88.9	70-130		%REC	1	7/23/2012 7:12:30 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	1	7/23/2012 7:12:30 PM
Surr: Dibromofluoromethane	118	70-130		%REC	1	7/23/2012 7:12:30 PM
Surr: Toluene-d8	102	70-130		%REC	1	7/23/2012 7:12:30 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207900-009

Matrix: TRIP BLANK

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:12:02 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:12:02 PM
Acetone	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 8:12:02 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 8:12:02 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 8:12:02 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207900-009

Matrix: TRIP BLANK

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 8:12:02 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 8:12:02 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 8:12:02 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 8:12:02 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 8:12:02 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/23/2012 8:12:02 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/23/2012 8:12:02 PM
Surr: Dibromofluoromethane	125	70-130		%REC	1	7/23/2012 8:12:02 PM
Surr: Toluene-d8	99.2	70-130		%REC	1	7/23/2012 8:12:02 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MEOH BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207900-010

Matrix: MEOH BLAN

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 7:38:36 PM
Surr: BFB	99.2	84-116		%REC	1	7/25/2012 7:38:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: JDJ
Benzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Toluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Naphthalene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 3:54:46 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 3:54:46 PM
Acetone	ND	0.75		mg/Kg	1	7/25/2012 3:54:46 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Bromoform	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Bromomethane	ND	0.15		mg/Kg	1	7/25/2012 3:54:46 PM
2-Butanone	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Chloroethane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Chloroform	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Chloromethane	ND	0.15		mg/Kg	1	7/25/2012 3:54:46 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MEOH BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207900-010

Matrix: MEOH BLAN

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: JDJ
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/25/2012 3:54:46 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/25/2012 3:54:46 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Styrene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Vinyl chloride	ND	0.050		mg/Kg	1	7/25/2012 3:54:46 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/25/2012 3:54:46 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%REC	1	7/25/2012 3:54:46 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/25/2012 3:54:46 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	7/25/2012 3:54:46 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	7/25/2012 3:54:46 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

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 #: 120724057
Project Name: 1207900

Analytical Results Report

Sample Number	120724057-001	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207900-001D / SWMU 14-3 (0-0.5')	Sampling Time	11:25 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.479	7/31/2012	CRW	EPA 335.4	
%moisture	5.6	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724057-002	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207900-002D / SWMU 14-3 (1.5-2')	Sampling Time	12:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.77	mg/Kg	0.565	7/31/2012	CRW	EPA 335.4	
%moisture	13.3	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724057-003	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207900-003D / SWMU 14-3 (8-10')	Sampling Time	12:15 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.567	7/31/2012	CRW	EPA 335.4	M2
%moisture	16.7	Percent		7/31/2012	CRW	%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 #: 120724057
Project Name: 1207900

Analytical Results Report

Sample Number	120724057-004	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM
Client Sample ID	1207900-004D / SWMU 14-3 (12-14')	Sampling Time	12:30 PM			
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.604	7/31/2012	CRW	EPA 335.4	M2
%moisture	17.5	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724057-005	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM
Client Sample ID	1207900-005D / SWMU 14-3 (25.5-26')	Sampling Time	12:45 PM			
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.55	7/31/2012	CRW	EPA 335.4	M2
%moisture	10.2	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724057-006	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM
Client Sample ID	1207900-006D / SWMU 14-1 (48-50')	Sampling Time	1:45 PM			
Matrix	Soil					
Comments						

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.569	7/31/2012	CRW	EPA 335.4	M2
%moisture	11.6	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

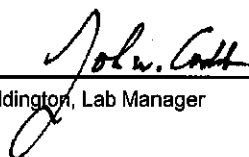
Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724057
Project Name: 1207900

Analytical Results Report

Sample Number	120724057-007	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207900-008F / FB071812	Sampling Time	1:15 PM				
Matrix	Water						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

M2 Matrix spike recovery was low; the associated blank spike recovery was acceptable. Potential matrix effect
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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R4938			RunNo: 4938					
Prep Date:		Analysis Date: 8/17/2012			SeqNo: 139688		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: R4938		RunNo: 4938					
Prep Date:			Analysis Date: 8/17/2012		SeqNo: 139689		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0.0005000	98.2	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Chromium	0.49	0.0060	0.5000	0	97.7	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.6	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Nickel	0.46	0.010	0.5000	0	92.5	85	115			
Silver	0.097	0.0050	0.1000	0	96.9	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			

Sample ID	1207807-002BMS			SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC			Batch ID:	R4938		RunNo:	4938			
Prep Date:				Analysis Date:	8/17/2012		SeqNo:	139709		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Barium	0.60	0.0020	0.5000	0.08916	102	70	130				

Sample ID	1207807-002BMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Metals				
Client ID:	BatchQC		Batch ID:	R4938		RunNo:	4938				
Prep Date:			Analysis Date:	8/17/2012		SeqNo:	139710		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Barium	0.59	0.0020	0.5000	0.08916	99.9	70	130	1.42	20		

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID:	R4970	RunNo:	4970					
Prep Date:		Analysis Date:	8/20/2012	SeqNo:	140607	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Metals					
Client ID:	LCSW	Batch ID:	R4970	RunNo:	4970					
Prep Date:		Analysis Date:	8/20/2012	SeqNo:	140608	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID	1207B81-004AMS	SampType:	MS	TestCode:	EPA Method 200.7: Metals					
Client ID:	BatchQC	Batch ID:	R4970	RunNo:	4970					
Prep Date:		Analysis Date:	8/20/2012	SeqNo:	140624	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.47	0.010	0.5000	0.009760	92.7	70	130			

Sample ID	1207B81-004AMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Metals					
Client ID:	BatchQC	Batch ID:	R4970	RunNo:	4970					
Prep Date:		Analysis Date:	8/20/2012	SeqNo:	140625	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.47	0.010	0.5000	0.009760	92.2	70	130	0.517	20	

Sample ID	MB-3063	SampType:	MBLK	TestCode:	EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID:	3063	RunNo:	4970					
Prep Date:	7/27/2012	Analysis Date:	8/20/2012	SeqNo:	141512	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3063		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: 3063		RunNo: 4970					
Prep Date:	7/27/2012		Analysis Date: 8/20/2012		SeqNo: 141513		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.6	85	115			
Chromium	0.49	0.0060	0.5000	0	97.6	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.0	85	115			
Manganese	0.48	0.0020	0.5000	0	96.7	85	115			
Nickel	0.47	0.010	0.5000	0	94.3	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			
Zinc	0.48	0.010	0.5000	0	96.1	85	115			

Sample ID	MB-3063		SampType: MBLK		TestCode: EPA Method 200.7: Metals					
Client ID:	PBW		Batch ID: 3063		RunNo: 4970					
Prep Date:	7/27/2012		Analysis Date: 8/20/2012		SeqNo: 141514		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS-3063		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: 3063		RunNo: 4970					
Prep Date:	7/27/2012		Analysis Date: 8/20/2012		SeqNo: 141515		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.51	0.020	0.5000	0	101	85	115			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3063		SampType:	MBLK		TestCode:	EPA 200.8: Metals			
Client ID:	PBW		Batch ID:	3063		RunNo:	4564			
Prep Date:	7/27/2012		Analysis Date:	7/31/2012		SeqNo:	128125	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID	1207508-003AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R4578		RunNo:	4578			
Prep Date:			Analysis Date:	7/31/2012		SeqNo:	128501	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.033	0.0010	0.02500	0.008736	97.7	70	130			

Sample ID	1207608-004AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R4578		RunNo:	4578			
Prep Date:			Analysis Date:	7/31/2012		SeqNo:	128507	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	70	130			
Arsenic	0.025	0.0010	0.02500	0	99.9	70	130			
Selenium	0.025	0.0010	0.02500	0	102	70	130			

Sample ID	1207806-004AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R4578		RunNo:	4578			
Prep Date:			Analysis Date:	7/31/2012		SeqNo:	128522	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.025	0.0010	0.02500	0	100	70	130			
Selenium	0.029	0.0010	0.02500	0.004090	98.9	70	130			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Metals			
Client ID:	LCSW		Batch ID:	R4578		RunNo:	4578			
Prep Date:			Analysis Date:	7/31/2012		SeqNo:	128780	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.028	0.0010	0.02500	0	112	85	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128781		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R4578			RunNo: 4578					
Prep Date:		Analysis Date: 7/31/2012			SeqNo: 128782		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R4578			RunNo: 4578					
Prep Date:		Analysis Date: 7/31/2012			SeqNo: 128784		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2979		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 2979		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122185		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-2979		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 2979		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122186		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.7	80	120			

Sample ID	1207546-001BMS		SampType: MS		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 2979		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122188		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	84.4	75	125			

Sample ID	1207546-001BMSD			SampType:	MSD		TestCode:	EPA Method 245.1: Mercury			
Client ID:	BatchQC			Batch ID:	2979		RunNo:	4384			
Prep Date:	7/23/2012			Analysis Date:	7/24/2012		SeqNo:	122191		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0040	0.00020	0.005000	0	79.7	75	125	5.66	20		

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2936	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	2936	RunNo:	4208					
Prep Date:	7/20/2012	Analysis Date:	7/21/2012	SeqNo:	120444	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	12		10.00		117	77.6	140			

Sample ID	LCS-2936	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	2936	RunNo:	4208					
Prep Date:	7/20/2012	Analysis Date:	7/21/2012	SeqNo:	120445	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.5	52.6	130			
Surr: DNOP	4.6		5.000		91.7	77.6	140			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2935	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW	Batch ID: 2935			RunNo: 4172					
Prep Date:	7/20/2012	Analysis Date: 7/20/2012			SeqNo: 120217		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		125	79.5	166			

Sample ID	LCS-2935		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 2935		RunNo: 4172					
Prep Date:	7/20/2012		Analysis Date: 7/20/2012		SeqNo: 120243		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	94.0	74	157			
Surr: DNOP	0.50		0.5000		99.4	79.5	166			

Sample ID	LCSD-2935		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 2935		RunNo: 4172					
Prep Date:	7/20/2012		Analysis Date: 7/20/2012		SeqNo: 120288		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.7	1.0	5.000	0	93.2	74	157	0.819	23	
Surr: DNOP	0.50		0.5000		101	79.5	166	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID: R4415			RunNo: 4415					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 123776		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		98.5	84	116			

Sample ID	2.5UG GRO LCSB		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R4415		RunNo: 4415					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123777		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	85	115			
Surr: BFB	1000		1000		103	84	116			

Sample ID	1207A80-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4415		RunNo: 4415					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123779		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.2	70	130			
Surr: BFB	3800		3732		103	84	116			

Sample ID	1207A80-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4415		RunNo: 4415					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123780		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.1	70	130	0.168	22.1	
Surr: BFB	3900		3732		104	84	116	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID: R4409			RunNo: 4409					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122827		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID: R4409			RunNo: 4409					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122828		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID	1207819-004AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4409		RunNo: 4409					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122835		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID	1207819-004AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range						
Client ID:	BatchQC		Batch ID: R4409		RunNo: 4409						
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122836		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR	
Surr: BFB	96		100.0		96.5	69.8	119	0	0		

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBW		Batch ID: R4435		RunNo: 4435					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123768		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.4	69.8	119			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSW		Batch ID: R4435		RunNo: 4435					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123769		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.0	75.9	119			
Surr: BFB	18		20.00		90.7	69.8	119			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b5	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/21/2012	SeqNo:	121267	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								
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b5	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121267		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.050								
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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121268		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	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs2		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121268	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID	1207900-002b ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	SWMU 14-3 (1.5-2')		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121269	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID	1207900-002b msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	SWMU 14-3 (1.5-2')		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121270	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122014	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								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
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: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122015	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	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207940-007b ms	SampType: MS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	BatchQC	Batch ID: R4379		RunNo: 4379						
Prep Date:	Analysis Date: 7/24/2012		SeqNo: 122016		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID	1207940-007b msd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122017		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2930	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	2930	RunNo:	4215					
Prep Date:	7/20/2012	Analysis Date:	7/20/2012	SeqNo:	120455	Units:	µg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.00								
Toluene	ND	1.00								
Ethylbenzene	ND	1.00								
Xylenes, Total	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	1.00								
1,2,4-Trimethylbenzene	ND	1.00								
1,3,5-Trimethylbenzene	ND	1.00								
1,2-Dichloroethane (EDC)	ND	1.00								
1,2-Dibromoethane (EDB)	ND	1.00								
Naphthalene	ND	1.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	1.00								
Bromodichloromethane	ND	1.00								
Bromoform	ND	1.00								
2-Butanone	ND	2.00								
Carbon tetrachloride	ND	1.00								
Chlorobenzene	ND	1.00								
Chloroethane	ND	1.00								
Chloroform	ND	1.00								
Chloromethane	ND	1.00								
2-Chlorotoluene	ND	1.00								
Carbon disulfide	ND	2.00								
4-Chlorotoluene	ND	1.00								
cis-1,2-DCE	ND	1.00								
cis-1,3-Dichloropropene	ND	1.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	1.00								
Dibromomethane	ND	1.00								
1,2-Dichlorobenzene	ND	1.00								
1,3-Dichlorobenzene	ND	1.00								
1,4-Dichlorobenzene	ND	1.00								
Dichlorodifluoromethane	ND	1.00								
1,1-Dichloroethane	ND	1.00								
1,1-Dichloroethene	ND	1.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	1.00								
2,2-Dichloropropane	ND	1.00								
1,1-Dichloropropene	ND	1.00								
Hexachlorobutadiene	ND	1.00								

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2930		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	2930		RunNo:	4215			
Prep Date:	7/20/2012		Analysis Date:	7/20/2012		SeqNo:	120455		Units: µg/Kg-dry	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.00								
4-Isopropyltoluene	ND	1.00								
Methylene chloride	ND	2.00								
n-Butylbenzene	ND	1.00								
2-Hexanone	ND	2.00								
n-Propylbenzene	ND	1.00								
sec-Butylbenzene	ND	1.00								
Styrene	ND	1.00								
4-Methyl-2-pentanone	ND	2.00								
tert-Butylbenzene	ND	1.00								
1,1,1,2-Tetrachloroethane	ND	1.00								
1,1,2,2-Tetrachloroethane	ND	1.00								
Tetrachloroethene (PCE)	ND	1.00								
trans-1,2-DCE	ND	1.00								
trans-1,3-Dichloropropene	ND	1.00								
1,2,3-Trichlorobenzene	ND	1.00								
1,2,4-Trichlorobenzene	ND	1.00								
1,1,1-Trichloroethane	ND	1.00								
1,1,2-Trichloroethane	ND	1.00								
Trichloroethene (TCE)	ND	1.00								
Trichlorofluoromethane	ND	1.00								
1,2,3-Trichloropropane	ND	1.00								
Vinyl chloride	ND	1.00								
Surr: 1,2-Dichloroethane-d4	52.9		50.00		106	70	130			
Surr: 4-Bromofluorobenzene	48.7		50.00		97.4	70	130			
Surr: Dibromofluoromethane	46.6		50.00		93.2	70	130			
Surr: Toluene-d8	50.9		50.00		102	70	130			

Sample ID	lcs-2930		SampType:	LCS		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	LCSS		Batch ID:	2930		RunNo:	4215			
Prep Date:	7/20/2012		Analysis Date:	7/20/2012		SeqNo:	120456		Units: µg/Kg-dry	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.0	1.00	10.00	0	110	60	140			
Toluene	10.6	1.00	10.00	0	106	60	140			
Chlorobenzene	10.9	1.00	10.00	0	109	60	140			
1,1-Dichloroethene	11.9	1.00	10.00	0	119	60	140			
Trichloroethene (TCE)	11.1	1.00	10.00	0	111	60	140			
Surr: 1,2-Dichloroethane-d4	51.8		50.00		104	70	130			
Surr: 4-Bromofluorobenzene	47.6		50.00		95.1	70	130			
Surr: Dibromofluoromethane	47.2		50.00		94.3	70	130			

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup**Project:** SWMU NO.14

Sample ID	Ics-2930		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 2930		RunNo: 4215					
Prep Date:	7/20/2012		Analysis Date: 7/20/2012		SeqNo: 120456		Units: µg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	49.8		50.00		99.7	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120975		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/20/2012	SeqNo:	120975	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/20/2012	SeqNo:	120980	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R4233		RunNo: 4233					
Prep Date:			Analysis Date: 7/20/2012		SeqNo: 120980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	1207711-001a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120981		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID	1207711-001a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4233		RunNo: 4233					
Prep Date:			Analysis Date: 7/20/2012		SeqNo: 120982		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID 100ng lcsb		SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW		Batch ID: R4375			RunNo: 4375					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 121820		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	97.1	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	83	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcsb		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4375		RunNo:	4375			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	121820	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21	1.0	20.00	0	104	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID	1207855-001ams		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4375		RunNo:	4375			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	121821	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	112	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		80.1	70	130			
Surr: Dibromofluoromethane	13		10.00		130	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

Sample ID	1207855-001amsd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4375		RunNo:	4375			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	121822	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	94.4	70	130	1.11	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	99.3	70	130	12.5	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	93.1	70	130	18.0	17.5	R
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.2		10.00		82.4	70	130	0	0	
Surr: Dibromofluoromethane	12		10.00		115	70	130	0	0	
Surr: Toluene-d8	11		10.00		110	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122005	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122005		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122005	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122008	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5 ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4375			RunNo: 4375					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 123094		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5 ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4375			RunNo: 4375					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 123094		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4433			RunNo: 4433					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 123684		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4433			RunNo: 4433					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 123684		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R4433			RunNo: 4433						
Prep Date:	Analysis Date: 7/25/2012			SeqNo: 123684		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		117	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	14		10.00		140	70	130			S
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R4433			RunNo: 4433						
Prep Date:	Analysis Date: 7/25/2012			SeqNo: 123687		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	84.1	126			
Toluene	19	1.0	20.00	0	96.1	80	120			
Chlorobenzene	19	1.0	20.00	0	95.5	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	83	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.6	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		116	70	130			
Surr: Dibromofluoromethane	12		10.00		119	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID 1207794-001ams	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: BatchQC	Batch ID: R4433			RunNo: 4433						
Prep Date:	Analysis Date: 7/25/2012			SeqNo: 123688		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207794-001ams		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4433		RunNo: 4433					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123688		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	120	5.0	100.0	0	123	66.8	128			
Toluene	100	5.0	100.0	0	103	70	130			
Chlorobenzene	99	5.0	100.0	0	98.6	70	130			
1,1-Dichloroethene	110	5.0	100.0	0	112	70	130			
Trichloroethene (TCE)	100	5.0	100.0	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	54		50.00		108	70	130			
Surr: 4-Bromofluorobenzene	51		50.00		103	70	130			
Surr: Dibromofluoromethane	66		50.00		131	70	130			S
Surr: Toluene-d8	53		50.00		105	70	130			

Sample ID	1207a11-001ams		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4433		RunNo: 4433					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123689		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9600	100	2000	7757	91.5	66.8	128			
Chlorobenzene	1900	100	2000	0	92.8	70	130			
1,1-Dichloroethene	2000	100	2000	0	101	70	130			
Trichloroethene (TCE)	2000	100	2000	0	97.6	70	130			
Surr: 1,2-Dichloroethane-d4	980		1000		97.6	70	130			
Surr: 4-Bromofluorobenzene	950		1000		95.2	70	130			
Surr: Dibromofluoromethane	1300		1000		126	70	130			
Surr: Toluene-d8	1100		1000		108	70	130			

Sample ID	1207794-001amsd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4433		RunNo: 4433					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 123690		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	120	5.0	100.0	0	117	66.8	128	5.19	16.7	R
Toluene	100	5.0	100.0	0	103	70	130	0.0720	18.7	
Chlorobenzene	99	5.0	100.0	0	99.4	70	130	0.818	19.5	
1,1-Dichloroethene	92	5.0	100.0	0	91.9	70	130	20.1	16.7	
Trichloroethene (TCE)	93	5.0	100.0	0	93.1	70	130	11.1	17.5	
Surr: 1,2-Dichloroethane-d4	50		50.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	52		50.00		105	70	130	0	0	
Surr: Dibromofluoromethane	62		50.00		123	70	130	0	0	
Surr: Toluene-d8	52		50.00		104	70	130	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207a11-001amsd	SampType: MSD		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	BatchQC	Batch ID: R4433		RunNo: 4433						
Prep Date:	Analysis Date: 7/25/2012		SeqNo: 123691		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9700	100	2000	7757	98.3	66.8	128	1.41	16.7	
Chlorobenzene	1900	100	2000	0	96.4	70	130	3.83	19.5	
1,1-Dichloroethene	2000	100	2000	0	102	70	130	0.569	16.7	
Trichloroethene (TCE)	1900	100	2000	0	92.6	70	130	5.27	17.5	
Surr: 1,2-Dichloroethane-d4	1100		1000		106	70	130	0	0	
Surr: 4-Bromofluorobenzene	1000		1000		101	70	130	0	0	
Surr: Dibromofluoromethane	1300		1000		135	70	130	0	0	S
Surr: Toluene-d8	1100		1000		106	70	130	0	0	

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125370		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125370		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125370		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125371		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	20	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.8	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125372		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	84.1	126			
Toluene	20	1.0	20.00	0	99.6	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.2	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	82.9	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	1207949-001a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125377		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.9	66.8	128			
Toluene	21	1.0	20.00	0.7920	102	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.2	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID 1207949-001a ms	SampType: MS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R4468		RunNo: 4468							
Prep Date:	Analysis Date: 7/25/2012		SeqNo: 125377		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID 1207a22-002ams	SampType: MS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R4468		RunNo: 4468							
Prep Date:	Analysis Date: 7/26/2012		SeqNo: 125378		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	990	50	1000	0	99.1	70	130			
1,1-Dichloroethene	910	50	1000	0	91.0	70	130			
Trichloroethene (TCE)	870	50	1000	0	86.7	70	130			
Surr: 1,2-Dichloroethane-d4	460		500.0		92.4	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.8	70	130			
Surr: Dibromofluoromethane	510		500.0		102	70	130			
Surr: Toluene-d8	500		500.0		101	70	130			

Sample ID 1207a22-002amsd	SampType: MSD		TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R4468		RunNo: 4468							
Prep Date:	Analysis Date: 7/26/2012		SeqNo: 125380		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	1000	50	1000	0	101	70	130	1.54	19.5	
1,1-Dichloroethene	870	50	1000	0	86.5	70	130	4.99	16.7	
Trichloroethene (TCE)	850	50	1000	0	85.2	70	130	1.72	17.5	
Surr: 1,2-Dichloroethane-d4	470		500.0		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130	0	0	
Surr: Dibromofluoromethane	520		500.0		104	70	130	0	0	
Surr: Toluene-d8	520		500.0		105	70	130	0	0	

Sample ID 1207949-001a msd	SampType: MSD		TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R4468		RunNo: 4468							
Prep Date:	Analysis Date: 7/25/2012		SeqNo: 125381		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.8	66.8	128	0.104	16.7	
Toluene	20	1.0	20.00	0.7920	96.9	70	130	4.87	18.7	
Chlorobenzene	19	1.0	20.00	0	96.2	70	130	7.41	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	87.7	70	130	3.88	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	83.0	70	130	2.51	17.5	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207949-001a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4468		RunNo: 4468					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 125381		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID	b15	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 125426		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b15	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R4468			RunNo: 4468						
Prep Date:	Analysis Date: 7/26/2012			SeqNo: 125426		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2962	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	2962	RunNo:	4428					
Prep Date:	7/23/2012	Analysis Date:	7/25/2012	SeqNo:	123425	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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2962		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 2962		RunNo: 4428					
Prep Date:	7/23/2012		Analysis Date: 7/25/2012		SeqNo: 123425		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		94.9	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.670		86.9	19	133			
Surr: 2-Fluorophenol	2.4		3.330		73.0	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		91.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		79.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.8	19.8	115			

Sample ID	lcs-2962		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 2962		RunNo: 4428					
Prep Date:	7/23/2012		Analysis Date: 7/25/2012		SeqNo: 123426		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2962	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 2962			RunNo: 4428					
Prep Date:	7/23/2012	Analysis Date: 7/25/2012			SeqNo: 123426		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	72.7	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	73.7	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	62.5	41.1	96.9			
1,4-Dichlorobenzene	0.96	0.20	1.670	0	57.6	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	83.6	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	75.2	39.1	86.9			
4-Nitrophenol	2.7	0.25	3.330	0	79.7	44.2	107			
Pentachlorophenol	2.4	0.40	3.330	0	71.3	36.2	80			
Phenol	2.3	0.20	3.330	0	69.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.1	0.20	1.670	0	66.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		100	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.9	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.4	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		89.3	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		73.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.5	19.8	115			

Qualifiers:

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J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122513		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122513		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2989		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122514		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID	Icsd-2989		SampType: LCSD			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSS02		Batch ID: 2989			RunNo: 4400				
Prep Date:	7/24/2012		Analysis Date: 7/24/2012			SeqNo: 122515		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

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 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3131		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128955		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-3131		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128956		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	93.3	80	120			

Sample ID	1207B18-001BMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128971		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.21	0.033	0.1648	0.06444	87.3	75	125			

Sample ID	1207B18-001BMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128972		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1651	0.06444	84.5	75	125	2.10	20	

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3009		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 3009		RunNo: 4698					
Prep Date:	7/24/2012		Analysis Date: 8/6/2012		SeqNo: 132140		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4698					
Prep Date:	7/24/2012		Analysis Date: 8/6/2012		SeqNo: 132141		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.9555	99.3	80	120			

Sample ID	MB-3009	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 3009			RunNo: 4699					
Prep Date:	7/24/2012	Analysis Date: 8/5/2012			SeqNo: 132220		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								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132221		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	28	2.5	25.00	0	114	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	27	0.10	25.00	0	107	80	120			
Beryllium	29	0.15	25.00	0.01250	117	80	120			
Cadmium	27	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Cobalt	29	0.30	25.00	0	115	80	120			
Lead	27	0.25	25.00	0	110	80	120			

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132221		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	26	0.10	25.00	0.07300	106	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	30	2.5	25.00	0	121	80	120			S
Silver	5.4	0.25	5.000	0	108	80	120			
Vanadium	27	2.5	25.00	0.07050	109	80	120			
Zinc	29	2.5	25.00	0	116	80	120			

Sample ID	1207917-005CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4699					
Prep Date:	7/24/2012	Analysis Date: 8/5/2012			SeqNo: 132249		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	23.84	0	89.4	75	125			
Beryllium	24	0.75	23.84	0.6761	97.6	75	125			
Cadmium	22	0.50	23.84	0	90.6	75	125			
Chromium	29	1.5	23.84	8.850	84.7	75	125			
Cobalt	26	1.5	23.84	4.445	90.6	75	125			
Lead	23	1.2	23.84	3.311	82.6	75	125			
Nickel	27	2.5	23.84	6.181	86.9	75	125			
Silver	4.0	1.2	4.768	0	83.8	75	125			

Sample ID	1207917-005CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132250		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	12	24.91	0	94.6	75	125	9.99	20	
Beryllium	25	0.75	24.91	0.6761	98.4	75	125	5.04	20	
Cadmium	23	0.50	24.91	0	90.6	75	125	4.33	20	
Chromium	32	1.5	24.91	8.850	94.1	75	125	10.6	20	
Cobalt	27	1.5	24.91	4.445	91.3	75	125	4.29	20	
Lead	25	1.2	24.91	3.311	87.3	75	125	8.61	20	
Nickel	29	2.5	24.91	6.181	91.7	75	125	7.56	20	
Silver	4.4	1.2	4.982	0	88.1	75	125	9.44	20	

Sample ID	1207917-005CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4734					
Prep Date:	7/24/2012	Analysis Date: 8/8/2012			SeqNo: 133485		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	13	12	23.84	0	54.1	75	125			S
Vanadium	43	12	23.84	31.42	47.7	75	125			S

Qualifiers:

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ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207900

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207917-005CMSD	SampType: MSD			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4734					
Prep Date:	7/24/2012	Analysis Date: 8/8/2012			SeqNo: 133486		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	14	12	24.91	0	57.7	75	125	10.9	20	S
Vanadium	55	12	24.91	31.42	93.0	75	125	24.2	20	R

Sample ID	1207917-005CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4816					
Prep Date:	7/24/2012	Analysis Date: 8/10/2012			SeqNo: 135933		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	23.84	3.961	28.4	75	125			S
Zinc	35	13	23.84	16.80	76.6	75	125			

Sample ID	1207917-005CMSD	SampType: MSD		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	BatchQC	Batch ID: 3009		RunNo: 4816						
Prep Date:	7/24/2012	Analysis Date: 8/10/2012		SeqNo: 135934		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.91	3.961	34.3	75	125	0	20	S
Zinc	39	13	24.91	16.80	90.3	75	125	11.4	20	

Qualifiers:

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
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: 1207900

Received by/date: *[Signature]* 07/20/12

Logged By: Ashley Gallegos 7/20/2012 7:55:00 AM *[Signature]*

Completed By: Ashley Gallegos 7/20/2012 9:45:16 AM *[Signature]*

Reviewed By: *[Signature]* 07/20/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☒ No ☐ NA
Added 6mL HNO₃ to -007E for acceptable pH.
11. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: 2
(<2 or >12 unless noted)

Adjusted: *yes*
Checked by: *[Signature]*

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. 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 SW, INC.

Gallup Refinery

Mailing Address: ROUTE 3 BOX 7

GALLUP, NM 87301

Phone #: 505-722-0217

email or Fax#: SCOTT CROUCH - RPS

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☒ EDD (Type) EXCEL

Date Time Matrix Sample Request ID

7-18-12 1045 WATER SWMU 14-3 GW

↓ ↓ ↓

7-18-12 1315 WATER FB071812

↓ ↓ ↓

7-18-12 1315 WATER FB071812

↓ ↓ ↓

7-18-12 1315 WATER FB071812

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7-18-12 1315 WATER FB071812

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7-18-12 1315 WATER FB071812

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7-18-12 1315 WATER FB071812

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7-18-12 1315 WATER FB071812

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7-18-12 1315 WATER FB071812

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7-18-12 1315 WATER FB071812

↓ ↓ ↓

7-18-12 1315 WATER FB071812

↓ ↓ ↓

7-18-12 1315 WATER FB071812

↓ ↓ ↓

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

1 LAMBER - -007

1 PLASTIC HNO3 -007

6 VOA HCL/NEAT -008

1 LAMBER - -008

1 PLASTIC HNO3 -008

1 PLASTIC NaOH -008

1 VOA HCL -009

2 VIALS MECH -010

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

1 LAMBER - -007

1 PLASTIC HNO3 -007

6 VOA HCL/NEAT -008

1 LAMBER - -008

1 PLASTIC HNO3 -008

1 PLASTIC NaOH -008

1 VOA HCL -009

2 VIALS MECH -010

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

1 LAMBER - -007

1 PLASTIC HNO3 -007

6 VOA HCL/NEAT -008

1 LAMBER - -008

1 PLASTIC HNO3 -008

1 PLASTIC NaOH -008

1 VOA HCL -009

2 VIALS MECH -010

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

1 LAMBER - -007

1 PLASTIC HNO3 -007

6 VOA HCL/NEAT -008

1 LAMBER - -008

1 PLASTIC HNO3 -008

1 PLASTIC NaOH -008

1 VOA HCL -009

2 VIALS MECH -010

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

1 LAMBER - -007

1 PLASTIC HNO3 -007

6 VOA HCL/NEAT -008

1 LAMBER - -008

1 PLASTIC HNO3 -008

1 PLASTIC NaOH -008

1 VOA HCL -009

2 VIALS MECH -010

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

1 LAMBER - -007

1 PLASTIC HNO3 -007

6 VOA HCL/NEAT -008

1 LAMBER - -008

1 PLASTIC HNO3 -008

1 PLASTIC NaOH -008

1 VOA HCL -009

2 VIALS MECH -010

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU NO.14

Project #:

SWMU NO.14

Project Manager:

SCOTT CROUCH - RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

Container Type and #

Preservative Type

HEAL No.

1207900

6 VOA HCL/NEAT -007

Analyte	Analytical Method
Antimony —	SW-846 method 6010/6020
Arsenic —	SW-846 method 6010/6020
Barium —	SW-846 method 6010/6020
Beryllium —	SW-846 method 6010/6020
Cadmium —	SW-846 method 6010/6020
Chromium —	SW-846 method 6010/6020
Cobalt —	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead —	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel —	SW-846 method 6010/6020
Selenium —	SW-846 method 6010/6020
Silver —	SW-846 method 6010/6020
Vanadium —	SW-846 method 6010/6020
Zinc —	SW-846 method 6010/6020
Iron —	SW-846 method 6010/6020
Manganese —	SW-846 method 6010/6020

Scott T. Crouch P.G.
 Senior Consultant - RPS
 Cielo Center, 1250 South Capital of Texas Highway, Building Three, Suite 200,
 Austin, Texas, 78746
 USA
 Tel: +1 512 347 7588
 Fax: +1 512 347 8243
 Direct: +1 512 879 6697
 Mobile: +1 512 297 3743
 Email: CrouchS@rpsgroup.com
 www: www.rpsgroup.com

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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

August 22, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1207917

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 13 sample(s) on 7/20/2012 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. 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. 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.

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 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:18:00 PM

Lab ID: 1207917-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	88	9.9		mg/Kg	1	7/23/2012 10:21:31 AM
Motor Oil Range Organics (MRO)	56	50		mg/Kg	1	7/23/2012 10:21:31 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 10:21:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/25/2012 10:02:17 PM
Surr: BFB	97.8	84-116		%REC	2	7/25/2012 10:02:17 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:58:53 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	2.5		mg/Kg	1	8/9/2012 5:34:54 AM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:54:51 PM
Barium	870	2.0		mg/Kg	20	8/8/2012 10:55:27 AM
Beryllium	0.33	0.15		mg/Kg	1	8/5/2012 7:25:13 PM
Cadmium	ND	0.10		mg/Kg	1	8/5/2012 7:25:13 PM
Chromium	3.4	0.30		mg/Kg	1	8/5/2012 7:25:13 PM
Cobalt	2.5	0.30		mg/Kg	1	8/5/2012 7:25:13 PM
Iron	3200	100		mg/Kg	100	8/8/2012 10:57:55 AM
Lead	ND	0.25		mg/Kg	1	8/5/2012 7:25:13 PM
Manganese	320	2.0		mg/Kg	20	8/8/2012 10:55:27 AM
Nickel	3.1	0.50		mg/Kg	1	8/5/2012 7:25:13 PM
Selenium	ND	2.5		mg/Kg	1	8/5/2012 7:25:13 PM
Silver	ND	0.25		mg/Kg	1	8/5/2012 7:25:13 PM
Vanadium	17	2.5		mg/Kg	1	8/5/2012 7:25:13 PM
Zinc	8.3	2.5		mg/Kg	1	8/5/2012 7:25:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Aniline	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Anthracene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Azobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:18:00 PM

Lab ID: 1207917-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Carbazole	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Chrysene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/25/2012 9:48:10 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Fluorene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Isophorone	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Naphthalene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:18:00 PM

Lab ID: 1207917-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/25/2012 9:48:10 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/25/2012 9:48:10 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Phenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Pyrene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Pyridine	ND	1.0		mg/Kg	1	7/25/2012 9:48:10 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 9:48:10 PM
Surr: 2,4,6-Tribromophenol	116	20.1-121		%REC	1	7/25/2012 9:48:10 PM
Surr: 2-Fluorobiphenyl	102	19-133		%REC	1	7/25/2012 9:48:10 PM
Surr: 2-Fluorophenol	101	20.2-108		%REC	1	7/25/2012 9:48:10 PM
Surr: 4-Terphenyl-d14	102	18.9-115		%REC	1	7/25/2012 9:48:10 PM
Surr: Nitrobenzene-d5	106	20.8-123		%REC	1	7/25/2012 9:48:10 PM
Surr: Phenol-d5	98.5	19.8-115		%REC	1	7/25/2012 9:48:10 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Toluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Ethylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Xylenes, Total	ND	2.81		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Methyl tert-butyl ether (MTBE)	ND	1.87		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,4-Trimethylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,3,5-Trimethylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dichloroethane (EDC)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dibromoethane (EDB)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Naphthalene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1-Methylnaphthalene	ND	3.74		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Methylnaphthalene	ND	3.74		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Acetone	ND	28.1		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Bromobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Bromodichloromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Bromoform	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Butanone	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Carbon tetrachloride	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Chlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Chloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Chloroform	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:18:00 PM

Lab ID: 1207917-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Chlorotoluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Carbon disulfide	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
4-Chlorotoluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
cis-1,2-DCE	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
cis-1,3-Dichloropropene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dibromo-3-chloropropane	ND	1.87		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Dibromochloromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Dibromomethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,3-Dichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,4-Dichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Dichlorodifluoromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1-Dichloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1-Dichloroethene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2-Dichloropropane	ND	1.87		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,3-Dichloropropane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2,2-Dichloropropane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1-Dichloropropene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Hexachlorobutadiene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Isopropylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
4-Isopropyltoluene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Methylene chloride	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
n-Butylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
2-Hexanone	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
n-Propylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
sec-Butylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Styrene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
4-Methyl-2-pentanone	ND	4.68		µg/Kg-dry	1	7/26/2012 5:39:45 PM
tert-Butylbenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,1,2-Tetrachloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,2,2-Tetrachloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Tetrachloroethene (PCE)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
trans-1,2-DCE	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
trans-1,3-Dichloropropene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,3-Trichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,4-Trichlorobenzene	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,1-Trichloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,1,2-Trichloroethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Trichloroethene (TCE)	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Trichlorofluoromethane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
1,2,3-Trichloropropane	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:18:00 PM

Lab ID: 1207917-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.935		µg/Kg-dry	1	7/26/2012 5:39:45 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	7/26/2012 5:39:45 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	1	7/26/2012 5:39:45 PM
Surr: Dibromofluoromethane	86.2	70-130		%REC	1	7/26/2012 5:39:45 PM
Surr: Toluene-d8	95.3	70-130		%REC	1	7/26/2012 5:39:45 PM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:30:00 PM

Lab ID: 1207917-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	39	10		mg/Kg	1	7/23/2012 8:40:31 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/23/2012 8:40:31 AM
Surr: DNOP	112	77.6-140		%REC	1	7/23/2012 8:40:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 10:30:55 PM
Surr: BFB	98.8	84-116		%REC	1	7/25/2012 10:30:55 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 11:00:41 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	2.5		mg/Kg	1	8/9/2012 5:37:28 AM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:05:34 PM
Barium	870	2.0		mg/Kg	20	8/8/2012 11:00:44 AM
Beryllium	0.51	0.15		mg/Kg	1	8/5/2012 7:27:43 PM
Cadmium	ND	0.10		mg/Kg	1	8/5/2012 7:27:43 PM
Chromium	5.2	0.30		mg/Kg	1	8/5/2012 7:27:43 PM
Cobalt	2.7	0.30		mg/Kg	1	8/5/2012 7:27:43 PM
Iron	7500	500		mg/Kg	500	8/8/2012 11:04:52 AM
Lead	0.37	0.25		mg/Kg	1	8/5/2012 7:27:43 PM
Manganese	340	2.0		mg/Kg	20	8/8/2012 11:00:44 AM
Nickel	4.4	0.50		mg/Kg	1	8/5/2012 7:27:43 PM
Selenium	ND	2.5		mg/Kg	1	8/5/2012 7:27:43 PM
Silver	ND	0.25		mg/Kg	1	8/5/2012 7:27:43 PM
Vanadium	13	2.5		mg/Kg	1	8/5/2012 7:27:43 PM
Zinc	10	2.5		mg/Kg	1	8/5/2012 7:27:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Aniline	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Azobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:30:00 PM

Lab ID: 1207917-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Carbazole	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Chrysene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/25/2012 10:18:04 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Fluorene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Isophorone	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Naphthalene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:30:00 PM

Lab ID: 1207917-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/25/2012 10:18:04 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:18:04 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Phenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Pyridine	ND	1.0		mg/Kg	1	7/25/2012 10:18:04 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:18:04 PM
Surr: 2,4,6-Tribromophenol	55.9	20.1-121		%REC	1	7/25/2012 10:18:04 PM
Surr: 2-Fluorobiphenyl	49.0	19-133		%REC	1	7/25/2012 10:18:04 PM
Surr: 2-Fluorophenol	44.4	20.2-108		%REC	1	7/25/2012 10:18:04 PM
Surr: 4-Terphenyl-d14	56.4	18.9-115		%REC	1	7/25/2012 10:18:04 PM
Surr: Nitrobenzene-d5	49.5	20.8-123		%REC	1	7/25/2012 10:18:04 PM
Surr: Phenol-d5	45.2	19.8-115		%REC	1	7/25/2012 10:18:04 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Toluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Ethylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Xylenes, Total	ND	2.52		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Methyl tert-butyl ether (MTBE)	ND	1.68		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,4-Trimethylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,3,5-Trimethylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dichloroethane (EDC)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dibromoethane (EDB)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Naphthalene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1-Methylnaphthalene	ND	3.36		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Methylnaphthalene	ND	3.36		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Acetone	ND	25.2		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Bromobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Bromodichloromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Bromoform	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Butanone	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Carbon tetrachloride	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Chlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Chloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Chloroform	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM

Qualifiers:

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- R RPD outside accepted recovery limits
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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:30:00 PM

Lab ID: 1207917-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Chlorotoluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Carbon disulfide	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
4-Chlorotoluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
cis-1,2-DCE	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
cis-1,3-Dichloropropene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dibromo-3-chloropropane	ND	1.68		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Dibromochloromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Dibromomethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,3-Dichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,4-Dichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Dichlorodifluoromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1-Dichloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1-Dichloroethene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2-Dichloropropane	ND	1.68		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,3-Dichloropropane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2,2-Dichloropropane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1-Dichloropropene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Hexachlorobutadiene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Isopropylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
4-Isopropyltoluene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Methylene chloride	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
n-Butylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
2-Hexanone	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
n-Propylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
sec-Butylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Styrene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
4-Methyl-2-pentanone	ND	4.20		µg/Kg-dry	1	7/26/2012 6:07:20 PM
tert-Butylbenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,1,2-Tetrachloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,2,2-Tetrachloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Tetrachloroethene (PCE)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
trans-1,2-DCE	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
trans-1,3-Dichloropropene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,3-Trichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,4-Trichlorobenzene	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,1-Trichloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,1,2-Trichloroethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Trichloroethene (TCE)	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Trichlorofluoromethane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
1,2,3-Trichloropropane	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 1:30:00 PM

Lab ID: 1207917-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.840		µg/Kg-dry	1	7/26/2012 6:07:20 PM
Surr: 1,2-Dichloroethane-d4	181	70-130	S	%REC	1	7/26/2012 6:07:20 PM
Surr: 4-Bromofluorobenzene	89.1	70-130		%REC	1	7/26/2012 6:07:20 PM
Surr: Dibromofluoromethane	83.0	70-130		%REC	1	7/26/2012 6:07:20 PM
Surr: Toluene-d8	98.4	70-130		%REC	1	7/26/2012 6:07:20 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (10-12')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:00:00 PM

Lab ID: 1207917-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	610	100		mg/Kg	10	7/22/2012 7:01:02 PM
Motor Oil Range Organics (MRO)	ND	510		mg/Kg	10	7/22/2012 7:01:02 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/22/2012 7:01:02 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	67	50		mg/Kg	10	7/25/2012 10:59:42 PM
Surr: BFB	165	84-116	S	%REC	10	7/25/2012 10:59:42 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 11:02:31 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 6:07:55 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:07:55 PM
Barium	460	2.0		mg/Kg	20	8/8/2012 11:18:39 AM
Beryllium	0.86	0.75		mg/Kg	5	8/5/2012 6:07:55 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 6:07:55 PM
Chromium	12	1.5		mg/Kg	5	8/5/2012 6:07:55 PM
Cobalt	5.0	1.5		mg/Kg	5	8/5/2012 6:07:55 PM
Iron	16000	500		mg/Kg	500	8/8/2012 11:21:06 AM
Lead	2.4	1.2		mg/Kg	5	8/5/2012 6:07:55 PM
Manganese	720	2.0		mg/Kg	20	8/8/2012 11:18:39 AM
Nickel	8.6	2.5		mg/Kg	5	8/5/2012 6:07:55 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 6:07:55 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 6:07:55 PM
Vanadium	25	12		mg/Kg	5	8/5/2012 6:07:55 PM
Zinc	22	12		mg/Kg	5	8/10/2012 5:27:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	1.0	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Aniline	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Azobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM

Qualifiers:

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (10-12')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:00:00 PM

Lab ID: 1207917-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Carbazole	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Chrysene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/25/2012 10:47:54 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Fluorene	1.4	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Isophorone	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
1-Methylnaphthalene	29	4.0		mg/Kg	10	7/26/2012 11:34:14 AM
2-Methylnaphthalene	46	4.0		mg/Kg	10	7/26/2012 11:34:14 AM
2-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Naphthalene	4.0	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (10-12')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:00:00 PM

Lab ID: 1207917-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/25/2012 10:47:54 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/25/2012 10:47:54 PM
Phenanthrene	3.3	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Phenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Pyrene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Pyridine	ND	1.0		mg/Kg	1	7/25/2012 10:47:54 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/25/2012 10:47:54 PM
Surr: 2,4,6-Tribromophenol	78.0	20.1-121		%REC	1	7/25/2012 10:47:54 PM
Surr: 2-Fluorobiphenyl	90.5	19-133		%REC	1	7/25/2012 10:47:54 PM
Surr: 2-Fluorophenol	101	20.2-108		%REC	1	7/25/2012 10:47:54 PM
Surr: 4-Terphenyl-d14	105	18.9-115		%REC	1	7/25/2012 10:47:54 PM
Surr: Nitrobenzene-d5	99.3	20.8-123		%REC	1	7/25/2012 10:47:54 PM
Surr: Phenol-d5	108	19.8-115		%REC	1	7/25/2012 10:47:54 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Ethylbenzene	1.4	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,4-Trimethylbenzene	7.8	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,3,5-Trimethylbenzene	1.7	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Naphthalene	9.2	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1-Methylnaphthalene	45	4.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Methylnaphthalene	90	20		mg/Kg	100	7/24/2012 11:40:15 AM
Acetone	ND	15		mg/Kg	20	7/23/2012 4:03:36 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM

Qualifiers:

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- ND Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (10-12')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:00:00 PM

Lab ID: 1207917-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 4:03:36 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 4:03:36 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (10-12')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:00:00 PM

Lab ID: 1207917-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 4:03:36 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 4:03:36 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	20	7/23/2012 4:03:36 PM
Surr: 4-Bromofluorobenzene	75.4	70-130		%REC	20	7/23/2012 4:03:36 PM
Surr: Dibromofluoromethane	103	70-130		%REC	20	7/23/2012 4:03:36 PM
Surr: Toluene-d8	104	70-130		%REC	20	7/23/2012 4:03:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (19.5-20')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:15:00 PM

Lab ID: 1207917-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2012 5:10:45 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/22/2012 5:10:45 PM
Surr: DNOP	113	77.6-140		%REC	1	7/22/2012 5:10:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/25/2012 11:28:30 PM
Surr: BFB	103	84-116		%REC	1	7/25/2012 11:28:30 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:47:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 6:10:19 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:10:19 PM
Barium	480	5.0		mg/Kg	50	8/8/2012 11:23:48 AM
Beryllium	1.3	0.75		mg/Kg	5	8/5/2012 6:10:19 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 6:10:19 PM
Chromium	22	1.5		mg/Kg	5	8/5/2012 6:10:19 PM
Cobalt	8.0	1.5		mg/Kg	5	8/5/2012 6:10:19 PM
Iron	23000	500		mg/Kg	500	8/8/2012 11:26:15 AM
Lead	1.4	1.2		mg/Kg	5	8/5/2012 6:10:19 PM
Manganese	1000	5.0		mg/Kg	50	8/8/2012 11:23:48 AM
Nickel	17	2.5		mg/Kg	5	8/5/2012 6:10:19 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 6:10:19 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 6:10:19 PM
Vanadium	15	12		mg/Kg	5	8/5/2012 6:10:19 PM
Zinc	25	12		mg/Kg	5	8/10/2012 5:31:16 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Aniline	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Azobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (19.5-20')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:15:00 PM

Lab ID: 1207917-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Carbazole	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Chrysene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/26/2012 8:04:37 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Fluorene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Isophorone	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Naphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (19.5-20')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:15:00 PM

Lab ID: 1207917-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/26/2012 8:04:37 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:04:37 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Phenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Pyridine	ND	0.50		mg/Kg	1	7/26/2012 8:04:37 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:04:37 PM
Surr: 2,4,6-Tribromophenol	79.7	20.1-121		%REC	1	7/26/2012 8:04:37 PM
Surr: 2-Fluorobiphenyl	69.3	19-133		%REC	1	7/26/2012 8:04:37 PM
Surr: 2-Fluorophenol	63.5	20.2-108		%REC	1	7/26/2012 8:04:37 PM
Surr: 4-Terphenyl-d14	71.5	18.9-115		%REC	1	7/26/2012 8:04:37 PM
Surr: Nitrobenzene-d5	68.2	20.8-123		%REC	1	7/26/2012 8:04:37 PM
Surr: Phenol-d5	62.0	19.8-115		%REC	1	7/26/2012 8:04:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Toluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Ethylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Xylenes, Total	ND	2.78		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Methyl tert-butyl ether (MTBE)	ND	1.85		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,4-Trimethylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,3,5-Trimethylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dichloroethane (EDC)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dibromoethane (EDB)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Naphthalene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1-Methylnaphthalene	ND	3.70		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Methylnaphthalene	ND	3.70		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Acetone	ND	27.8		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Bromobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Bromodichloromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Bromoform	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Butanone	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Carbon tetrachloride	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Chlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Chloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Chloroform	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (19.5-20')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:15:00 PM

Lab ID: 1207917-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Chlorotoluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Carbon disulfide	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
4-Chlorotoluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
cis-1,2-DCE	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
cis-1,3-Dichloropropene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dibromo-3-chloropropane	ND	1.85		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Dibromochloromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Dibromomethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,3-Dichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,4-Dichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Dichlorodifluoromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1-Dichloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1-Dichloroethene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2-Dichloropropane	ND	1.85		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,3-Dichloropropane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2,2-Dichloropropane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1-Dichloropropene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Hexachlorobutadiene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Isopropylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
4-Isopropyltoluene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Methylene chloride	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
n-Butylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
2-Hexanone	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
n-Propylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
sec-Butylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Styrene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
4-Methyl-2-pentanone	ND	4.63		µg/Kg-dry	1	7/26/2012 6:34:57 PM
tert-Butylbenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,1,2-Tetrachloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,2,2-Tetrachloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Tetrachloroethene (PCE)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
trans-1,2-DCE	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
trans-1,3-Dichloropropene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,3-Trichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,4-Trichlorobenzene	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,1-Trichloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,1,2-Trichloroethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Trichloroethene (TCE)	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Trichlorofluoromethane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
1,2,3-Trichloropropane	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-4 (19.5-20')

Project: SWMU NO.14

Collection Date: 7/17/2012 2:15:00 PM

Lab ID: 1207917-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.925		µg/Kg-dry	1	7/26/2012 6:34:57 PM
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%REC	1	7/26/2012 6:34:57 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%REC	1	7/26/2012 6:34:57 PM
Surr: Dibromofluoromethane	91.2	70-130		%REC	1	7/26/2012 6:34:57 PM
Surr: Toluene-d8	94.2	70-130		%REC	1	7/26/2012 6:34:57 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:10:00 PM

Lab ID: 1207917-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	53	9.9		mg/Kg	1	7/23/2012 9:05:34 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/23/2012 9:05:34 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 9:05:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/25/2012 11:57:16 PM
Surr: BFB	101	84-116		%REC	2	7/25/2012 11:57:16 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:48:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 5:33:46 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 6:12:43 PM
Barium	700	2.0		mg/Kg	20	8/8/2012 11:28:59 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 6:12:43 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 6:12:43 PM
Chromium	8.8	1.5		mg/Kg	5	8/5/2012 6:12:43 PM
Cobalt	4.4	1.5		mg/Kg	5	8/5/2012 6:12:43 PM
Iron	14000	500		mg/Kg	500	8/8/2012 11:31:24 AM
Lead	3.3	1.2		mg/Kg	5	8/5/2012 6:12:43 PM
Manganese	510	2.0		mg/Kg	20	8/8/2012 11:28:59 AM
Nickel	6.2	2.5		mg/Kg	5	8/5/2012 6:12:43 PM
Selenium	ND	12		mg/Kg	5	8/8/2012 11:55:49 AM
Silver	ND	1.2		mg/Kg	5	8/5/2012 6:12:43 PM
Vanadium	31	12		mg/Kg	5	8/8/2012 11:55:49 AM
Zinc	17	13		mg/Kg	5	8/10/2012 5:33:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Aniline	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Azobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:10:00 PM

Lab ID: 1207917-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Carbazole	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Chrysene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/26/2012 8:34:24 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Fluorene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Isophorone	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Naphthalene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:10:00 PM

Lab ID: 1207917-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/26/2012 8:34:24 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/26/2012 8:34:24 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Phenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Pyrene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Pyridine	ND	0.50		mg/Kg	1	7/26/2012 8:34:24 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 8:34:24 PM
Surr: 2,4,6-Tribromophenol	95.3	20.1-121		%REC	1	7/26/2012 8:34:24 PM
Surr: 2-Fluorobiphenyl	86.2	19-133		%REC	1	7/26/2012 8:34:24 PM
Surr: 2-Fluorophenol	68.8	20.2-108		%REC	1	7/26/2012 8:34:24 PM
Surr: 4-Terphenyl-d14	87.7	18.9-115		%REC	1	7/26/2012 8:34:24 PM
Surr: Nitrobenzene-d5	79.1	20.8-123		%REC	1	7/26/2012 8:34:24 PM
Surr: Phenol-d5	74.2	19.8-115		%REC	1	7/26/2012 8:34:24 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Toluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Naphthalene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/21/2012 5:04:07 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/21/2012 5:04:07 PM
Acetone	ND	0.75		mg/Kg	1	7/21/2012 5:04:07 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Bromoform	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Bromomethane	ND	0.15		mg/Kg	1	7/21/2012 5:04:07 PM
2-Butanone	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Chloroethane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:10:00 PM

Lab ID: 1207917-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Chloromethane	ND	0.15		mg/Kg	1	7/21/2012 5:04:07 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/21/2012 5:04:07 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/21/2012 5:04:07 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Styrene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit
 U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:10:00 PM

Lab ID: 1207917-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.050		mg/Kg	1	7/21/2012 5:04:07 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/21/2012 5:04:07 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	7/21/2012 5:04:07 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	1	7/21/2012 5:04:07 PM
Surr: Dibromofluoromethane	91.3	70-130		%REC	1	7/21/2012 5:04:07 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	7/21/2012 5:04:07 PM

Qualifiers:

* / X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:24:00 PM

Lab ID: 1207917-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	6200	200		mg/Kg	20	7/23/2012 8:24:32 AM
Motor Oil Range Organics (MRO)	ND	980		mg/Kg	20	7/23/2012 8:24:32 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 8:24:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/26/2012 12:25:59 AM
Surr: BFB	104	84-116		%REC	50	7/26/2012 12:25:59 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:50:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 5:43:48 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 5:43:48 PM
Barium	470	5.0		mg/Kg	50	8/10/2012 6:04:10 PM
Beryllium	0.76	0.75		mg/Kg	5	8/10/2012 5:43:48 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 5:43:48 PM
Chromium	12	1.5		mg/Kg	5	8/10/2012 5:43:48 PM
Cobalt	3.8	1.5		mg/Kg	5	8/10/2012 5:43:48 PM
Iron	11000	500		mg/Kg	500	8/10/2012 6:06:36 PM
Lead	4.4	1.3		mg/Kg	5	8/10/2012 5:43:48 PM
Manganese	530	5.0		mg/Kg	50	8/10/2012 6:04:10 PM
Nickel	7.3	2.5		mg/Kg	5	8/10/2012 5:43:48 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 5:43:48 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 5:43:48 PM
Vanadium	21	13		mg/Kg	5	8/10/2012 5:43:48 PM
Zinc	35	13		mg/Kg	5	8/10/2012 5:43:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:24:00 PM

Lab ID: 1207917-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 9:04:09 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Fluorene	1.8	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
1-Methylnaphthalene	5.9	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2-Methylnaphthalene	6.4	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Naphthalene	1.0	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:24:00 PM

Lab ID: 1207917-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/26/2012 9:04:09 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:04:09 PM
Phenanthrene	3.2	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 9:04:09 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:04:09 PM
Surr: 2,4,6-Tribromophenol	98.5	20.1-121		%REC	1	7/26/2012 9:04:09 PM
Surr: 2-Fluorobiphenyl	87.9	19-133		%REC	1	7/26/2012 9:04:09 PM
Surr: 2-Fluorophenol	99.2	20.2-108		%REC	1	7/26/2012 9:04:09 PM
Surr: 4-Terphenyl-d14	93.9	18.9-115		%REC	1	7/26/2012 9:04:09 PM
Surr: Nitrobenzene-d5	111	20.8-123		%REC	1	7/26/2012 9:04:09 PM
Surr: Phenol-d5	96.0	19.8-115		%REC	1	7/26/2012 9:04:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,4-Trimethylbenzene	1.8	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,3,5-Trimethylbenzene	1.1	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Naphthalene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1-Methylnaphthalene	4.7	4.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Methylnaphthalene	5.6	4.0		mg/Kg	20	7/23/2012 5:28:47 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 5:28:47 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM

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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:24:00 PM

Lab ID: 1207917-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 5:28:47 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 5:28:47 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM

Qualifiers:

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- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:24:00 PM

Lab ID: 1207917-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 5:28:47 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 5:28:47 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%REC	20	7/23/2012 5:28:47 PM
Surr: 4-Bromofluorobenzene	72.3	70-130		%REC	20	7/23/2012 5:28:47 PM
Surr: Dibromofluoromethane	108	70-130		%REC	20	7/23/2012 5:28:47 PM
Surr: Toluene-d8	100	70-130		%REC	20	7/23/2012 5:28:47 PM

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Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	3300	190		mg/Kg	20	7/23/2012 11:19:26 AM
Motor Oil Range Organics (MRO)	ND	970		mg/Kg	20	7/23/2012 11:19:26 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 11:19:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/26/2012 12:54:47 AM
Surr: BFB	106	84-116		%REC	50	7/26/2012 12:54:47 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.29	0.033		mg/Kg	1	8/3/2012 3:52:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Arsenic	ND	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Barium	400	5.0		mg/Kg	50	8/10/2012 6:11:40 PM
Beryllium	0.58	0.15		mg/Kg	1	8/10/2012 8:35:35 PM
Cadmium	ND	0.10		mg/Kg	1	8/10/2012 8:35:35 PM
Chromium	76	1.5		mg/Kg	5	8/10/2012 6:09:14 PM
Cobalt	3.7	0.30		mg/Kg	1	8/10/2012 8:35:35 PM
Iron	14000	500		mg/Kg	500	8/10/2012 6:14:05 PM
Lead	4.6	0.25		mg/Kg	1	8/10/2012 8:35:35 PM
Manganese	400	5.0		mg/Kg	50	8/10/2012 6:11:40 PM
Nickel	6.6	0.50		mg/Kg	1	8/10/2012 8:35:35 PM
Selenium	ND	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Silver	ND	0.25		mg/Kg	1	8/10/2012 8:35:35 PM
Vanadium	20	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
Zinc	37	2.5		mg/Kg	1	8/10/2012 8:35:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 9:33:54 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Fluorene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
1-Methylnaphthalene	16	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2-Methylnaphthalene	16	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Naphthalene	2.5	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/26/2012 9:33:54 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 9:33:54 PM
Phenanthrene	3.0	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 9:33:54 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 9:33:54 PM
Surr: 2,4,6-Tribromophenol	79.6	20.1-121		%REC	1	7/26/2012 9:33:54 PM
Surr: 2-Fluorobiphenyl	93.4	19-133		%REC	1	7/26/2012 9:33:54 PM
Surr: 2-Fluorophenol	91.3	20.2-108		%REC	1	7/26/2012 9:33:54 PM
Surr: 4-Terphenyl-d14	101	18.9-115		%REC	1	7/26/2012 9:33:54 PM
Surr: Nitrobenzene-d5	103	20.8-123		%REC	1	7/26/2012 9:33:54 PM
Surr: Phenol-d5	85.4	19.8-115		%REC	1	7/26/2012 9:33:54 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Ethylbenzene	1.1	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,4-Trimethylbenzene	6.2	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Naphthalene	3.0	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1-Methylnaphthalene	16	4.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Methylnaphthalene	17	4.0		mg/Kg	20	7/23/2012 6:25:15 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 6:25:15 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 6:25:15 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 6:25:15 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10')

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 6:25:15 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 6:25:15 PM
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%REC	20	7/23/2012 6:25:15 PM
Surr: 4-Bromofluorobenzene	86.1	70-130		%REC	20	7/23/2012 6:25:15 PM
Surr: Dibromofluoromethane	110	70-130		%REC	20	7/23/2012 6:25:15 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/23/2012 6:25:15 PM

Qualifiers:

* / X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10') Dup

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	11000	510		mg/Kg	50	7/23/2012 1:31:08 PM
Motor Oil Range Organics (MRO)	ND	2600		mg/Kg	50	7/23/2012 1:31:08 PM
Surr: DNOP	0	77.6-140	S	%REC	50	7/23/2012 1:31:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	500		mg/Kg	100	7/26/2012 1:23:27 AM
Surr: BFB	102	84-116		%REC	100	7/26/2012 1:23:27 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	1.5	0.16		mg/Kg	5	8/3/2012 4:06:38 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Arsenic	ND	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Barium	400	5.0		mg/Kg	50	8/10/2012 6:19:10 PM
Beryllium	0.70	0.15		mg/Kg	1	8/10/2012 8:38:21 PM
Cadmium	ND	0.10		mg/Kg	1	8/10/2012 8:38:21 PM
Chromium	97	1.5		mg/Kg	5	8/10/2012 6:16:43 PM
Cobalt	4.2	0.30		mg/Kg	1	8/10/2012 8:38:21 PM
Iron	16000	500		mg/Kg	500	8/10/2012 6:21:37 PM
Lead	5.7	0.25		mg/Kg	1	8/10/2012 8:38:21 PM
Manganese	330	5.0		mg/Kg	50	8/10/2012 6:19:10 PM
Nickel	7.5	0.50		mg/Kg	1	8/10/2012 8:38:21 PM
Selenium	ND	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Silver	ND	0.25		mg/Kg	1	8/10/2012 8:38:21 PM
Vanadium	23	2.5		mg/Kg	1	8/10/2012 8:38:21 PM
Zinc	64	12		mg/Kg	5	8/10/2012 6:16:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

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Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10') Dup

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 8:24:10 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
1-Methylnaphthalene	19	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2-Methylnaphthalene	20	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Naphthalene	3.1	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10') Dup

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 8:24:10 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 8:24:10 AM
Phenanthrene	3.3	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 8:24:10 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 8:24:10 AM
Surr: 2,4,6-Tribromophenol	71.8	20.1-121		%REC	1	7/27/2012 8:24:10 AM
Surr: 2-Fluorobiphenyl	81.5	19-133		%REC	1	7/27/2012 8:24:10 AM
Surr: 2-Fluorophenol	94.0	20.2-108		%REC	1	7/27/2012 8:24:10 AM
Surr: 4-Terphenyl-d14	99.6	18.9-115		%REC	1	7/27/2012 8:24:10 AM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/27/2012 8:24:10 AM
Surr: Phenol-d5	92.1	19.8-115		%REC	1	7/27/2012 8:24:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Ethylbenzene	1.0	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,4-Trimethylbenzene	5.4	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Naphthalene	2.9	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1-Methylnaphthalene	15	4.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Methylnaphthalene	17	4.0		mg/Kg	20	7/23/2012 7:21:44 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 7:21:44 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM

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- B Analyte detected in the associated Method Blank
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10') Dup

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 7:21:44 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 7:21:44 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (8-10') Dup

Project: SWMU NO.14

Collection Date: 7/17/2012 4:45:00 PM

Lab ID: 1207917-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 7:21:44 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 7:21:44 PM
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	20	7/23/2012 7:21:44 PM
Surr: 4-Bromofluorobenzene	83.4	70-130		%REC	20	7/23/2012 7:21:44 PM
Surr: Dibromofluoromethane	101	70-130		%REC	20	7/23/2012 7:21:44 PM
Surr: Toluene-d8	103	70-130		%REC	20	7/23/2012 7:21:44 PM

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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (16-18')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:10:00 PM

Lab ID: 1207917-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	34	9.6		mg/Kg	1	7/23/2012 9:30:58 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/23/2012 9:30:58 AM
Surr: DNOP	109	77.6-140		%REC	1	7/23/2012 9:30:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/26/2012 1:52:09 AM
Surr: BFB	98.9	84-116		%REC	1	7/26/2012 1:52:09 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 3:57:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 6:32:52 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 6:32:52 PM
Barium	520	5.0		mg/Kg	50	8/10/2012 6:36:56 PM
Beryllium	1.3	0.75		mg/Kg	5	8/10/2012 6:32:52 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:32:52 PM
Chromium	18	1.5		mg/Kg	5	8/10/2012 6:32:52 PM
Cobalt	7.2	1.5		mg/Kg	5	8/10/2012 6:32:52 PM
Iron	26000	1000		mg/Kg	1000	8/15/2012 7:08:47 AM
Lead	ND	1.3		mg/Kg	5	8/10/2012 6:32:52 PM
Manganese	1100	5.0		mg/Kg	50	8/10/2012 6:36:56 PM
Nickel	16	2.5		mg/Kg	5	8/10/2012 6:32:52 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 6:32:52 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 6:32:52 PM
Vanadium	22	13		mg/Kg	5	8/10/2012 6:32:52 PM
Zinc	26	13		mg/Kg	5	8/10/2012 6:32:52 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (16-18')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:10:00 PM

Lab ID: 1207917-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 8:53:35 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM

Qualifiers:

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- E Value above quantitation range
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- H Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (16-18')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:10:00 PM

Lab ID: 1207917-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 8:53:35 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 8:53:35 AM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 8:53:35 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 8:53:35 AM
Surr: 2,4,6-Tribromophenol	101	20.1-121		%REC	1	7/27/2012 8:53:35 AM
Surr: 2-Fluorobiphenyl	79.0	19-133		%REC	1	7/27/2012 8:53:35 AM
Surr: 2-Fluorophenol	79.7	20.2-108		%REC	1	7/27/2012 8:53:35 AM
Surr: 4-Terphenyl-d14	78.9	18.9-115		%REC	1	7/27/2012 8:53:35 AM
Surr: Nitrobenzene-d5	78.7	20.8-123		%REC	1	7/27/2012 8:53:35 AM
Surr: Phenol-d5	88.5	19.8-115		%REC	1	7/27/2012 8:53:35 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Toluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Ethylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Xylenes, Total	ND	3.08		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Methyl tert-butyl ether (MTBE)	ND	2.05		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,4-Trimethylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,3,5-Trimethylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dichloroethane (EDC)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dibromoethane (EDB)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Naphthalene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1-Methylnaphthalene	ND	4.11		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Methylnaphthalene	ND	4.11		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Acetone	ND	30.8		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Bromobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Bromodichloromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Bromoform	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Butanone	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Carbon tetrachloride	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Chlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Chloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Chloroform	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (16-18')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:10:00 PM

Lab ID: 1207917-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Chlorotoluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Carbon disulfide	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
4-Chlorotoluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
cis-1,2-DCE	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
cis-1,3-Dichloropropene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dibromo-3-chloropropane	ND	2.05		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Dibromochloromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Dibromomethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,3-Dichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,4-Dichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Dichlorodifluoromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1-Dichloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1-Dichloroethene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2-Dichloropropane	ND	2.05		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,3-Dichloropropane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2,2-Dichloropropane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1-Dichloropropene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Hexachlorobutadiene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Isopropylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
4-Isopropyltoluene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Methylene chloride	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
n-Butylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
2-Hexanone	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
n-Propylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
sec-Butylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Styrene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
4-Methyl-2-pentanone	ND	5.14		µg/Kg-dry	1	7/26/2012 7:02:39 PM
tert-Butylbenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,1,2-Tetrachloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,2,2-Tetrachloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Tetrachloroethene (PCE)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
trans-1,2-DCE	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
trans-1,3-Dichloropropene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,3-Trichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,4-Trichlorobenzene	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,1-Trichloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,1,2-Trichloroethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Trichloroethene (TCE)	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Trichlorofluoromethane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
1,2,3-Trichloropropane	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (16-18')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:10:00 PM

Lab ID: 1207917-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.03		µg/Kg-dry	1	7/26/2012 7:02:39 PM
Surr: 1,2-Dichloroethane-d4	132	70-130	S	%REC	1	7/26/2012 7:02:39 PM
Surr: 4-Bromofluorobenzene	86.5	70-130		%REC	1	7/26/2012 7:02:39 PM
Surr: Dibromofluoromethane	66.9	70-130	S	%REC	1	7/26/2012 7:02:39 PM
Surr: Toluene-d8	91.0	70-130		%REC	1	7/26/2012 7:02:39 PM

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- S Spike Recovery outside accepted recovery limits

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (24-25')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:30:00 PM

Lab ID: 1207917-010

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/22/2012 5:32:53 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/22/2012 5:32:53 PM
Surr: DNOP	112	77.6-140		%REC	1	7/22/2012 5:32:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/26/2012 2:20:49 AM
Surr: BFB	99.9	84-116		%REC	1	7/26/2012 2:20:49 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:08:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 6:41:43 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 6:41:43 PM
Barium	460	5.0		mg/Kg	50	8/10/2012 6:44:11 PM
Beryllium	1.1	0.75		mg/Kg	5	8/10/2012 6:41:43 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:41:43 PM
Chromium	18	1.5		mg/Kg	5	8/10/2012 6:41:43 PM
Cobalt	9.7	1.5		mg/Kg	5	8/10/2012 6:41:43 PM
Iron	19000	500		mg/Kg	500	8/10/2012 6:46:36 PM
Lead	ND	1.3		mg/Kg	5	8/10/2012 6:41:43 PM
Manganese	980	5.0		mg/Kg	50	8/10/2012 6:44:11 PM
Nickel	17	2.5		mg/Kg	5	8/10/2012 6:41:43 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 6:41:43 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 6:41:43 PM
Vanadium	52	13		mg/Kg	5	8/10/2012 6:41:43 PM
Zinc	31	13		mg/Kg	5	8/10/2012 6:41:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (24-25')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:30:00 PM

Lab ID: 1207917-010

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 9:23:05 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (24-25')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:30:00 PM

Lab ID: 1207917-010

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 9:23:05 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 9:23:05 AM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 9:23:05 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 9:23:05 AM
Surr: 2,4,6-Tribromophenol	93.3	20.1-121		%REC	1	7/27/2012 9:23:05 AM
Surr: 2-Fluorobiphenyl	89.4	19-133		%REC	1	7/27/2012 9:23:05 AM
Surr: 2-Fluorophenol	81.6	20.2-108		%REC	1	7/27/2012 9:23:05 AM
Surr: 4-Terphenyl-d14	81.1	18.9-115		%REC	1	7/27/2012 9:23:05 AM
Surr: Nitrobenzene-d5	89.6	20.8-123		%REC	1	7/27/2012 9:23:05 AM
Surr: Phenol-d5	89.1	19.8-115		%REC	1	7/27/2012 9:23:05 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Toluene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Ethylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Xylenes, Total	ND	2.97		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Methyl tert-butyl ether (MTBE)	ND	1.98		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,4-Trimethylbenzene	11.0	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,3,5-Trimethylbenzene	1.12	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dichloroethane (EDC)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dibromoethane (EDB)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Naphthalene	3.34	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1-Methylnaphthalene	25.0	3.95		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Methylnaphthalene	19.7	3.95		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Acetone	ND	29.7		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Bromobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Bromodichloromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Bromoform	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Butanone	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Carbon tetrachloride	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Chlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Chloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Chloroform	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (24-25')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:30:00 PM

Lab ID: 1207917-010

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Chlorotoluene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Carbon disulfide	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
4-Chlorotoluene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
cis-1,2-DCE	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
cis-1,3-Dichloropropene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dibromo-3-chloropropane	ND	1.98		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Dibromochloromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Dibromomethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,3-Dichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,4-Dichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Dichlorodifluoromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1-Dichloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1-Dichloroethene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2-Dichloropropane	ND	1.98		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,3-Dichloropropane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2,2-Dichloropropane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1-Dichloropropene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Hexachlorobutadiene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Isopropylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
4-Isopropyltoluene	1.12	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Methylene chloride	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
n-Butylbenzene	1.68	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
2-Hexanone	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
n-Propylbenzene	2.03	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
sec-Butylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Styrene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
4-Methyl-2-pentanone	ND	4.94		µg/Kg-dry	1	7/26/2012 7:30:13 PM
tert-Butylbenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,1,2-Tetrachloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,2,2-Tetrachloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Tetrachloroethene (PCE)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
trans-1,2-DCE	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
trans-1,3-Dichloropropene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,3-Trichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,4-Trichlorobenzene	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,1-Trichloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,1,2-Trichloroethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Trichloroethene (TCE)	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Trichlorofluoromethane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
1,2,3-Trichloropropane	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 (24-25')

Project: SWMU NO.14

Collection Date: 7/17/2012 5:30:00 PM

Lab ID: 1207917-010

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.989		µg/Kg-dry	1	7/26/2012 7:30:13 PM
Surr: 1,2-Dichloroethane-d4	183	70-130	S	%REC	1	7/26/2012 7:30:13 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	7/26/2012 7:30:13 PM
Surr: Dibromofluoromethane	90.3	70-130		%REC	1	7/26/2012 7:30:13 PM
Surr: Toluene-d8	94.8	70-130		%REC	1	7/26/2012 7:30:13 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:00:00 PM

Lab ID: 1207917-011

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 6:35:12 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 6:35:12 PM
Surr: DNOP	127	79.5-166		%REC	1	7/23/2012 6:35:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/24/2012 8:06:38 PM
Surr: BFB	108	69.8-119		%REC	1	7/24/2012 8:06:38 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Chromium	ND	0.0060		mg/L	1	8/20/2012 10:55:39 AM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:32:40 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:32:40 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:32:40 PM
Nickel	ND	0.010		mg/L	1	8/20/2012 10:55:39 AM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:32:40 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:32:40 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 10:55:39 AM
EPA 200.8: METALS						Analyst: SNV
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:36:25 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:57:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Aniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Anthracene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 12:16:24 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 12:16:24 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:00:00 PM

Lab ID: 1207917-011

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Carbazole	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Chrysene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Fluorene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Isophorone	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 12:16:24 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:00:00 PM

Lab ID: 1207917-011

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 12:16:24 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 12:16:24 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Phenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Pyrene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Pyridine	ND	10		µg/L	1	7/25/2012 12:16:24 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:16:24 PM
Surr: 2,4,6-Tribromophenol	100	44.2-126		%REC	1	7/25/2012 12:16:24 PM
Surr: 2-Fluorobiphenyl	80.6	37-114		%REC	1	7/25/2012 12:16:24 PM
Surr: 2-Fluorophenol	72.9	23.4-98		%REC	1	7/25/2012 12:16:24 PM
Surr: 4-Terphenyl-d14	85.8	41.3-116		%REC	1	7/25/2012 12:16:24 PM
Surr: Nitrobenzene-d5	84.6	39.5-118		%REC	1	7/25/2012 12:16:24 PM
Surr: Phenol-d5	53.5	20.9-95.9		%REC	1	7/25/2012 12:16:24 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:41:36 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 8:41:36 PM
Acetone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 8:41:36 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 8:41:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:00:00 PM

Lab ID: 1207917-011

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 8:41:36 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 8:41:36 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 8:41:36 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:00:00 PM

Lab ID: 1207917-011

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 8:41:36 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 8:41:36 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 8:41:36 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/23/2012 8:41:36 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/23/2012 8:41:36 PM
Surr: Dibromofluoromethane	123	70-130		%REC	1	7/23/2012 8:41:36 PM
Surr: Toluene-d8	99.0	70-130		%REC	1	7/23/2012 8:41:36 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:15:00 PM

Lab ID: 1207917-012

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 7:00:23 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 7:00:23 PM
Surr: DNOP	129	79.5-166		%REC	1	7/23/2012 7:00:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/24/2012 8:36:56 PM
Surr: BFB	96.0	69.8-119		%REC	1	7/24/2012 8:36:56 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Chromium	ND	0.0060		mg/L	1	8/20/2012 10:59:36 AM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:40:51 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:40:51 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:40:51 PM
Nickel	ND	0.010		mg/L	1	8/20/2012 10:59:36 AM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:40:51 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:40:51 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 10:59:36 AM
EPA 200.8: METALS						Analyst: SNV
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:40:21 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:59:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Aniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Anthracene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 12:46:00 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 12:46:00 PM

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:15:00 PM

Lab ID: 1207917-012

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Carbazole	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Chrysene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Fluorene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Isophorone	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 12:46:00 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:15:00 PM

Lab ID: 1207917-012

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 12:46:00 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 12:46:00 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Phenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Pyrene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Pyridine	ND	10		µg/L	1	7/25/2012 12:46:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 12:46:00 PM
Surr: 2,4,6-Tribromophenol	95.4	44.2-126		%REC	1	7/25/2012 12:46:00 PM
Surr: 2-Fluorobiphenyl	86.6	37-114		%REC	1	7/25/2012 12:46:00 PM
Surr: 2-Fluorophenol	66.4	23.4-98		%REC	1	7/25/2012 12:46:00 PM
Surr: 4-Terphenyl-d14	93.3	41.3-116		%REC	1	7/25/2012 12:46:00 PM
Surr: Nitrobenzene-d5	85.5	39.5-118		%REC	1	7/25/2012 12:46:00 PM
Surr: Phenol-d5	52.6	20.9-95.9		%REC	1	7/25/2012 12:46:00 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:11:35 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:11:35 PM
Acetone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 9:11:35 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 9:11:35 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:15:00 PM

Lab ID: 1207917-012

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 9:11:35 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 9:11:35 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 9:11:35 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071712

Project: SWMU NO.14

Collection Date: 7/17/2012 6:15:00 PM

Lab ID: 1207917-012

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 9:11:35 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 9:11:35 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 9:11:35 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	7/23/2012 9:11:35 PM
Surr: 4-Bromofluorobenzene	117	70-130		%REC	1	7/23/2012 9:11:35 PM
Surr: Dibromofluoromethane	112	70-130		%REC	1	7/23/2012 9:11:35 PM
Surr: Toluene-d8	106	70-130		%REC	1	7/23/2012 9:11:35 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207917-013

Matrix: TRIP BLANK

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Toluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Ethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Naphthalene	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:41:26 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/23/2012 9:41:26 PM
Acetone	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Bromobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Bromoform	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Bromomethane	ND	3.0		µg/L	1	7/23/2012 9:41:26 PM
2-Butanone	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Carbon disulfide	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Chlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Chloroethane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Chloroform	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Chloromethane	ND	3.0		µg/L	1	7/23/2012 9:41:26 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Dibromomethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
2-Hexanone	ND	10		µg/L	1	7/23/2012 9:41:26 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207917

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207917-013

Matrix: TRIP BLANK

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Isopropylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/23/2012 9:41:26 PM
Methylene Chloride	ND	3.0		µg/L	1	7/23/2012 9:41:26 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Styrene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/23/2012 9:41:26 PM
Vinyl chloride	ND	1.0		µg/L	1	7/23/2012 9:41:26 PM
Xylenes, Total	ND	1.5		µg/L	1	7/23/2012 9:41:26 PM
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	7/23/2012 9:41:26 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	7/23/2012 9:41:26 PM
Surr: Dibromofluoromethane	116	70-130		%REC	1	7/23/2012 9:41:26 PM
Surr: Toluene-d8	97.0	70-130		%REC	1	7/23/2012 9:41:26 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

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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 #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-001	Sampling Date	7/17/2012	Date/Time Received	7/24/2012 12:47 PM		
Client Sample ID	1207917-001D / SWMU 14-4 (0-0.5')	Sampling Time	1:18 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.466	7/31/2012	CRW	EPA 335.4	
%moisture	4.8	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-002	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-002D / SWMU 14-4 (1.5-2.0')	Sampling Time	1:30 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.566	7/31/2012	CRW	EPA 335.4	
%moisture	13.6	Percent		7/31/2012	CRW	%moisture	

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

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-003	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-003D / SWMU 14-4 (10-12')	Sampling Time	2:00 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.534	7/31/2012	CRW	EPA 335.4	
%moisture	14.1	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-004	Sampling Date	7/17/2012	Date/Time Received	7/24/2012 12:47 PM		
Client Sample ID	1207917-004D / SWMU 14-4 (19.5-20')	Sampling Time	2:15 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.509	7/31/2012	CRW	EPA 335.4	
%moisture	13	Percent		7/31/2012	CRW	%moisture	

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Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-005	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-005D / SWMU 14-2 (0-0.5')	Sampling Time	4:10 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.511	7/31/2012	CRW	EPA 335.4	
%moisture	6.3	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-006	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-006D / SWMU 14-2 (1.5-2.0')	Sampling Time	4:24 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.534	7/31/2012	CRW	EPA 335.4	
%moisture	9.7	Percent		7/31/2012	CRW	%moisture	

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

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-007	Sampling Date	7/17/2012	Date/Time Received	7/24/2012 12:47 PM		
Client Sample ID	1207917-007D / SWMU 14-2 (8-10')	Sampling Time	4:45 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.574	7/31/2012	CRW	EPA 335.4	
%moisture	17.5	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-008	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-008D / SWMU 14-2 (8-10') DUP	Sampling Time	4:45 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.609	7/31/2012	CRW	EPA 335.4	
%moisture	17.7	Percent		7/31/2012	CRW	%moisture	

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

Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-009	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-009D / SWMU 14-2 (16-18')	Sampling Time	5:10 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.587	7/31/2012	CRW	EPA 335.4	
%moisture	14.8	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724077-010	Sampling Date	7/17/2012	Date/Time Received	7/24/2012	12:47 PM	
Client Sample ID	1207917-010D / SWMU 14-2 (24-25')	Sampling Time	5:30 PM	Extraction Date			
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.542	7/31/2012	CRW	EPA 335.4	
%moisture	12.1	Percent		7/31/2012	CRW	%moisture	

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

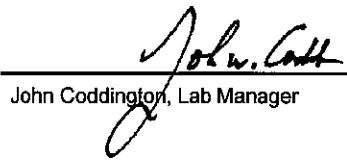
Batch #: 120724077
Project Name: 1207917

Analytical Results Report

Sample Number	120724077-011	Sampling Date	7/17/2012	Date/Time Received	7/24/2012 12:47 PM		
Client Sample ID	1207917-011F / FB071712	Sampling Time	6:00 PM	Extraction Date			
Matrix	Water	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Sample Number	120724077-012	Sampling Date	7/17/2012	Date/Time Received	7/24/2012 12:47 PM		
Client Sample ID	1207917-012F / FB071712	Sampling Time	6:15 PM	Extraction Date			
Matrix	Water	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	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.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID MB	SampType: MBLK		TestCode: EPA Method 200.7: Metals							
Client ID: PBW	Batch ID: R4938		RunNo: 4938							
Prep Date:	Analysis Date: 8/17/2012		SeqNo: 139688		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 200.7: Metals							
Client ID: LCSW	Batch ID: R4938		RunNo: 4938							
Prep Date:	Analysis Date: 8/17/2012		SeqNo: 139689		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0.0005000	98.2	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.6	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.097	0.0050	0.1000	0	96.9	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			

Sample ID 1207807-002BMS	SampType: MS		TestCode: EPA Method 200.7: Metals							
Client ID: BatchQC	Batch ID: R4938		RunNo: 4938							
Prep Date:	Analysis Date: 8/17/2012		SeqNo: 139709		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.60	0.0020	0.5000	0.08916	102	70	130			

Sample ID 1207807-002BMSD	SampType: MSD		TestCode: EPA Method 200.7: Metals							
Client ID: BatchQC	Batch ID: R4938		RunNo: 4938							
Prep Date:	Analysis Date: 8/17/2012		SeqNo: 139710		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.59	0.0020	0.5000	0.08916	99.9	70	130	1.42	20	

Sample ID MB	SampType: MBLK		TestCode: EPA Method 200.7: Metals							
Client ID: PBW	Batch ID: R4970		RunNo: 4970							
Prep Date:	Analysis Date: 8/20/2012		SeqNo: 140607		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R4970			RunNo: 4970					
Prep Date:		Analysis Date: 8/20/2012			SeqNo: 140607		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Nickel	ND	0.010								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: R4970		RunNo: 4970					
Prep Date:			Analysis Date: 8/20/2012		SeqNo: 140608		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.0	85	115			
Nickel	0.46	0.010	0.5000	0	92.5	85	115			
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID	1207B81-004AMS		SampType: MS		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R4970		RunNo: 4970					
Prep Date:			Analysis Date: 8/20/2012		SeqNo: 140624		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.3	70	130			
Nickel	0.44	0.010	0.5000	0	88.9	70	130			
Zinc	0.47	0.010	0.5000	0.009760	92.7	70	130			

Sample ID	1207B81-004AMSD		SampType: MSD		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R4970		RunNo: 4970					
Prep Date:			Analysis Date: 8/20/2012		SeqNo: 140625		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.5	70	130	0.186	20	
Nickel	0.44	0.010	0.5000	0	88.8	70	130	0.0540	20	
Zinc	0.47	0.010	0.5000	0.009760	92.2	70	130	0.517	20	

Qualifiers:

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207508-003AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128501		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.033	0.0010	0.02500	0.008736	97.7	70	130			

Sample ID	1207608-004AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128507		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	70	130			
Arsenic	0.025	0.0010	0.02500	0	99.9	70	130			
Selenium	0.025	0.0010	0.02500	0	102	70	130			

Sample ID	1207806-004AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128522		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.025	0.0010	0.02500	0	100	70	130			
Selenium	0.029	0.0010	0.02500	0.004090	98.9	70	130			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128780		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.028	0.0010	0.02500	0	112	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128781		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Qualifiers:

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ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Metals					
Client ID:	PBW	Batch ID:	R4578	RunNo:	4578					
Prep Date:		Analysis Date:	7/31/2012	SeqNo:	128782	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Metals					
Client ID:	PBW	Batch ID:	R4578	RunNo:	4578					
Prep Date:		Analysis Date:	7/31/2012	SeqNo:	128784	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2980		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122215		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-2980		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122216		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.7	80	120			

Sample ID	1207906-001BMS		SampType: MS		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122218		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.1	75	125			

Sample ID	1207906-001BMSD		SampType: MSD		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122219		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	75	125	0.305	20	

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2946	SampType:	MBLK		TestCode:	EPA Method 8015B: Diesel Range Organics				
Client ID:	PBS	Batch ID:	2946		RunNo:	4221				
Prep Date:	7/21/2012	Analysis Date:	7/22/2012		SeqNo:	120621		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	77.6	140			

Sample ID	LCS-2946		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2946		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120623		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	76.3	52.6	130			
Surr: DNOP	4.5		5.000		90.5	77.6	140			

Sample ID	1207838-001AMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 2946			RunNo: 4221					
Prep Date:	7/21/2012	Analysis Date: 7/22/2012			SeqNo: 120626		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.7	48.73	0	78.1	57.2	146			
Surr: DNOP	4.4		4.873		89.6	77.6	140			

Sample ID	1207838-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 2946		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120627		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.9	49.55	0	71.7	57.2	146	6.92	24.5	
Surr: DNOP	4.4		4.955		88.1	77.6	140	0	0	

Qualifiers:

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ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2965	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW	Batch ID: 2965			RunNo: 4229					
Prep Date:	7/23/2012	Analysis Date: 7/23/2012			SeqNo: 121391		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		123	79.5	166			

Sample ID	LCS-2965		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 2965		RunNo: 4229					
Prep Date:	7/23/2012		Analysis Date: 7/23/2012		SeqNo: 121392		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.0	74	157			
Surr: DNOP	0.51		0.5000		102	79.5	166			

Sample ID	LCSD-2965	SampType: LCSD			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02	Batch ID: 2965			RunNo: 4229					
Prep Date:	7/23/2012	Analysis Date: 7/23/2012			SeqNo: 121393		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.9	74	157	0.931	23	
Surr: DNOP	0.53		0.5000		106	79.5	166	0	0	

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	R4415	RunNo:	4415					
Prep Date:		Analysis Date:	7/25/2012	SeqNo:	123776	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		98.5	84	116			

Sample ID	2.5UG GRO LCSB	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	R4415	RunNo:	4415					
Prep Date:		Analysis Date:	7/25/2012	SeqNo:	123777	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	85	115			
Surr: BFB	1000		1000		103	84	116			

Sample ID	1207A80-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R4415	RunNo:	4415					
Prep Date:		Analysis Date:	7/25/2012	SeqNo:	123779	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.2	70	130			
Surr: BFB	3800		3732		103	84	116			

Sample ID	1207A80-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R4415	RunNo:	4415					
Prep Date:		Analysis Date:	7/25/2012	SeqNo:	123780	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	89	25	93.31	0	95.1	70	130	0.168	22.1	
Surr: BFB	3900		3732		104	84	116	0	0	

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID: R4409			RunNo: 4409					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122827		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID: R4409			RunNo: 4409					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122828		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID	1207819-004AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4409		RunNo: 4409					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122835		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID	1207819-004AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4409		RunNo: 4409					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122836		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Qualifiers:

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H Holding times for preparation or analysis exceeded
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RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b5	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/21/2012	SeqNo:	121267	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								
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

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ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b5	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121267		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.050								
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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121268		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	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs2		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121268	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID	1207900-002b ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121269	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID	1207900-002b msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121270	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122014	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								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
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: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122015	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	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207940-007b ms	SampType: MS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	BatchQC	Batch ID: R4379		RunNo: 4379						
Prep Date:	Analysis Date: 7/24/2012		SeqNo: 122016		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID	1207940-007b msd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122017		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/20/2012	SeqNo:	120975	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120975		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	1207711-001a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120981		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID	1207711-001a msd			SampType: MSD	TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4233		RunNo: 4233					
Prep Date:	Analysis Date: 7/20/2012			SeqNo: 120982		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID	100ng lcsb	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4375			RunNo: 4375					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 121820		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	97.1	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	111	83	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcsb		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4375		RunNo:	4375			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	121820	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21	1.0	20.00	0	104	76.2	119			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID	1207855-001ams		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4375		RunNo:	4375			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	121821	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	93.3	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	112	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Surr: 4-Bromofluorobenzene	8.0		10.00		80.1	70	130			
Surr: Dibromofluoromethane	13		10.00		130	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

Sample ID	1207855-001amsd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4375		RunNo:	4375			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	121822	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	19	1.0	20.00	0	94.4	70	130	1.11	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	99.3	70	130	12.5	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	93.1	70	130	18.0	17.5	R
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.2		10.00		82.4	70	130	0	0	
Surr: Dibromofluoromethane	12		10.00		115	70	130	0	0	
Surr: Toluene-d8	11		10.00		110	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122005	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122005		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122005	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122008	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122636		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	4.0								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122639		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	1207922-010a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 122640		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID 1207922-010a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES						
Client ID: BatchQC		Batch ID: R4402		RunNo: 4402						
Prep Date:		Analysis Date: 7/25/2012		SeqNo: 122641			Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID	5 ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4375			RunNo: 4375					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 123094		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5 ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4375			RunNo: 4375					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 123094		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5 ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R4375	RunNo:	4375					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	123094	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2962	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	2962	RunNo:	4428					
Prep Date:	7/23/2012	Analysis Date:	7/25/2012	SeqNo:	123425	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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2962		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 2962			RunNo: 4428				
Prep Date:	7/23/2012		Analysis Date: 7/25/2012			SeqNo: 123425		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		94.9	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.670		86.9	19	133			
Surr: 2-Fluorophenol	2.4		3.330		73.0	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		91.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		79.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.8	19.8	115			

Sample ID	lcs-2962		SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSS		Batch ID: 2962			RunNo: 4428				
Prep Date:	7/23/2012		Analysis Date: 7/25/2012			SeqNo: 123426		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2962	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 2962			RunNo: 4428					
Prep Date:	7/23/2012	Analysis Date: 7/25/2012			SeqNo: 123426		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	72.7	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	73.7	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	62.5	41.1	96.9			
1,4-Dichlorobenzene	0.96	0.20	1.670	0	57.6	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	83.6	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	75.2	39.1	86.9			
4-Nitrophenol	2.7	0.25	3.330	0	79.7	44.2	107			
Pentachlorophenol	2.4	0.40	3.330	0	71.3	36.2	80			
Phenol	2.3	0.20	3.330	0	69.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.1	0.20	1.670	0	66.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		100	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.9	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.4	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		89.3	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		73.4	20.8	123			
Surr: Phenol-d5	2.6		3.330		78.5	19.8	115			

Sample ID	mb-2996		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 2996			RunNo: 4454				
Prep Date:	7/24/2012		Analysis Date: 7/26/2012			SeqNo: 124345		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	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2996	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	2996	RunNo:	4454					
Prep Date:	7/24/2012	Analysis Date:	7/26/2012	SeqNo:	124345	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2996		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124345		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		79.2	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.3	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		87.9	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.2	20.8	123			
Surr: Phenol-d5	2.7		3.330		82.4	19.8	115			

Sample ID	lcs-2996		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124346		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	69.0	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	67.9	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	61.9	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	80.8	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.1	39.1	86.9			
4-Nitrophenol	2.8	0.25	3.330	0	82.9	44.2	107			
Pentachlorophenol	2.3	0.40	3.330	0	68.1	36.2	80			
Phenol	2.5	0.20	3.330	0	73.9	42.7	92.7			
Pyrene	1.0	0.20	1.670	0	62.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.4	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		82.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		75.6	19	133			
Surr: 2-Fluorophenol	2.2		3.330		66.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.8	20.8	123			
Surr: Phenol-d5	2.5		3.330		74.7	19.8	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207666-001Ams	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	2996	RunNo:	4454					
Prep Date:	7/24/2012	Analysis Date:	7/26/2012	SeqNo:	124359	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.3	1.0	8.322	0	75.9	38.6	100			
4-Chloro-3-methylphenol	14	2.5	16.59	0	86.5	35.8	108			
2-Chlorophenol	13	1.0	16.59	0	79.4	48.2	96.1			
1,4-Dichlorobenzene	6.0	1.0	8.322	0	72.5	42.5	97.6			
2,4-Dinitrotoluene	7.0	2.5	8.322	0	84.0	51.2	108			
N-Nitrosodi-n-propylamine	7.0	1.0	8.322	0	84.7	31.6	114			
4-Nitrophenol	16	1.2	16.59	0.3837	94.3	22.7	144			
Pentachlorophenol	9.8	2.0	16.59	0	59.3	24	109			
Phenol	17	1.0	16.59	6.194	66.9	33.1	108			
Pyrene	5.2	1.0	8.322	0	62.5	42.7	98.9			
1,2,4-Trichlorobenzene	6.1	1.0	8.322	0	73.0	27.1	118			
Surr: 2,4,6-Tribromophenol	15		16.59		92.7	20.1	121			
Surr: 2-Fluorobiphenyl	6.6		8.322		79.8	19	133			
Surr: 2-Fluorophenol	13		16.59		75.7	20.2	108			
Surr: 4-Terphenyl-d14	6.3		8.322		75.6	18.9	115			
Surr: Nitrobenzene-d5	6.7		8.322		80.5	20.8	123			
Surr: Phenol-d5	15		16.59		88.8	19.8	115			

Sample ID	1207666-001Amsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	2996	RunNo:	4454					
Prep Date:	7/24/2012	Analysis Date:	7/26/2012	SeqNo:	124360	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.2	1.0	8.406	0	73.4	38.6	100	2.26	20	
4-Chloro-3-methylphenol	14	2.5	16.76	0	81.8	35.8	108	4.66	20	
2-Chlorophenol	13	1.0	16.76	0	79.6	48.2	96.1	1.28	20	
1,4-Dichlorobenzene	6.2	1.0	8.406	0	73.6	42.5	97.6	2.48	20	
2,4-Dinitrotoluene	6.8	2.5	8.406	0	81.0	51.2	108	2.63	20	
N-Nitrosodi-n-propylamine	7.4	1.0	8.406	0	88.4	31.6	114	5.25	20	
4-Nitrophenol	15	1.3	16.76	0.3837	86.4	22.7	144	7.52	20	
Pentachlorophenol	10	2.0	16.76	0	61.0	24	109	3.78	20	
Phenol	20	1.0	16.76	6.194	81.0	33.1	108	13.4	20	
Pyrene	4.8	1.0	8.406	0	57.5	42.7	98.9	7.41	20	
1,2,4-Trichlorobenzene	6.3	1.0	8.406	0	74.7	27.1	118	3.30	20	
Surr: 2,4,6-Tribromophenol	15		16.76		88.4	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	6.3		8.406		75.1	19	133	0	0	
Surr: 2-Fluorophenol	14		16.76		81.8	20.2	108	0	0	
Surr: 4-Terphenyl-d14	6.1		8.406		72.3	18.9	115	0	0	
Surr: Nitrobenzene-d5	6.7		8.406		79.6	20.8	123	0	0	
Surr: Phenol-d5	15		16.76		88.2	19.8	115	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122513		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	2989	RunNo:	4400					
Prep Date:	7/24/2012	Analysis Date:	7/24/2012	SeqNo:	122513	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2989		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122514		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID	Icsd-2989		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122515		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3131		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128955		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-3131		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128956		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	93.3	80	120			

Sample ID	1207B18-001BMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128971		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.21	0.033	0.1648	0.06444	87.3	75	125			

Sample ID	1207B18-001BMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128972		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1651	0.06444	84.5	75	125	2.10	20	

Sample ID	MB-3180		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131070		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-3180		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131071		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			

Sample ID	1207917-009CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 14-2 (16-18')		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131078		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1658	0	98.9	75	125			

Qualifiers:

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 E Value above quantitation range
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 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207917-009CMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	SWMU 14-2 (16-18')	Batch ID:	3180	RunNo:	4662					
Prep Date:	8/3/2012	Analysis Date:	8/3/2012	SeqNo:	131081	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1651	0	115	75	125	14.8	20	

Qualifiers:

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3107		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	3107		RunNo:	4677			
Prep Date:	7/31/2012		Analysis Date:	8/6/2012		SeqNo:	131415		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-3107		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	3107		RunNo:	4677			
Prep Date:	7/31/2012		Analysis Date:	8/6/2012		SeqNo:	131416		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.5	80	120			
Barium	23	0.10	25.00	0	91.0	80	120			
Beryllium	25	0.15	25.00	0	98.2	80	120			
Cadmium	23	0.10	25.00	0	91.9	80	120			
Chromium	23	0.30	25.00	0	90.5	80	120			
Lead	23	0.25	25.00	0	91.2	80	120			
Manganese	22	0.10	25.00	0	89.5	80	120			
Nickel	22	0.50	25.00	0	88.1	80	120			
Selenium	23	2.5	25.00	0	93.1	80	120			
Silver	4.6	0.25	5.000	0	92.6	80	120			
Vanadium	24	2.5	25.00	0	94.5	80	120			
Zinc	23	2.5	25.00	0	93.0	80	120			

Sample ID	MB-3009		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	3009		RunNo:	4698			
Prep Date:	7/24/2012		Analysis Date:	8/6/2012		SeqNo:	132140		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

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E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4698					
Prep Date:	7/24/2012		Analysis Date: 8/6/2012		SeqNo: 132141		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.9555	99.3	80	120			

Sample ID	MB-3107		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 3107		RunNo: 4698					
Prep Date:	7/31/2012		Analysis Date: 8/6/2012		SeqNo: 132142		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	LCS-3107		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3107		RunNo: 4698					
Prep Date:	7/31/2012		Analysis Date: 8/6/2012		SeqNo: 132143		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.7880	103	80	120			

Sample ID	MB-3009	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 3009			RunNo: 4699					
Prep Date:	7/24/2012	Analysis Date: 8/5/2012			SeqNo: 132220		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								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132221		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	28	2.5	25.00	0	114	80	120			

Qualifiers:

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E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3009		SampType: LCS			TestCode: EPA Method 6010B: Soil Metals				
Client ID:	LCSS		Batch ID: 3009			RunNo: 4699				
Prep Date:	7/24/2012		Analysis Date: 8/5/2012			SeqNo: 132221		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	27	0.10	25.00	0	107	80	120			
Beryllium	29	0.15	25.00	0.01250	117	80	120			
Cadmium	27	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Cobalt	29	0.30	25.00	0	115	80	120			
Lead	27	0.25	25.00	0	110	80	120			
Manganese	26	0.10	25.00	0.07300	106	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	30	2.5	25.00	0	121	80	120			S
Silver	5.4	0.25	5.000	0	108	80	120			
Vanadium	27	2.5	25.00	0.07050	109	80	120			
Zinc	29	2.5	25.00	0	116	80	120			

Sample ID	1207917-005CMS		SampType: MS			TestCode: EPA Method 6010B: Soil Metals				
Client ID:	SWMU 14-2 (0-0.5')		Batch ID: 3009			RunNo: 4699				
Prep Date:	7/24/2012		Analysis Date: 8/5/2012			SeqNo: 132249		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	23.84	0	89.4	75	125			
Beryllium	24	0.75	23.84	0.6761	97.6	75	125			
Cadmium	22	0.50	23.84	0	90.6	75	125			
Chromium	29	1.5	23.84	8.850	84.7	75	125			
Cobalt	26	1.5	23.84	4.445	90.6	75	125			
Lead	23	1.2	23.84	3.311	82.6	75	125			
Nickel	27	2.5	23.84	6.181	86.9	75	125			
Silver	4.0	1.2	4.768	0	83.8	75	125			

Sample ID	1207917-005CMSD		SampType: MSD			TestCode: EPA Method 6010B: Soil Metals				
Client ID:	SWMU 14-2 (0-0.5')		Batch ID: 3009			RunNo: 4699				
Prep Date:	7/24/2012		Analysis Date: 8/5/2012			SeqNo: 132250		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	12	24.91	0	94.6	75	125	9.99	20	
Beryllium	25	0.75	24.91	0.6761	98.4	75	125	5.04	20	
Cadmium	23	0.50	24.91	0	90.6	75	125	4.33	20	
Chromium	32	1.5	24.91	8.850	94.1	75	125	10.6	20	
Cobalt	27	1.5	24.91	4.445	91.3	75	125	4.29	20	
Lead	25	1.2	24.91	3.311	87.3	75	125	8.61	20	
Nickel	29	2.5	24.91	6.181	91.7	75	125	7.56	20	
Silver	4.4	1.2	4.982	0	88.1	75	125	9.44	20	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3107		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 3107		RunNo: 4734					
Prep Date:	7/31/2012		Analysis Date: 8/8/2012		SeqNo: 133431		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Cobalt	ND	0.30								

Sample ID	LCS-3107		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3107		RunNo: 4734					
Prep Date:	7/31/2012		Analysis Date: 8/8/2012		SeqNo: 133432		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	26	2.5	25.00	0	103	80	120			
Cobalt	24	0.30	25.00	0	94.8	80	120			

Sample ID	1207917-005CMS		SampType: MS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-2 (0-0.5')		Batch ID: 3009		RunNo: 4734					
Prep Date:	7/24/2012		Analysis Date: 8/8/2012		SeqNo: 133485		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	13	12	23.84	0	54.1	75	125			S
Vanadium	43	12	23.84	31.42	47.7	75	125			S

Sample ID	1207917-005CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-2 (0-0.5')		Batch ID: 3009		RunNo: 4734					
Prep Date:	7/24/2012		Analysis Date: 8/8/2012		SeqNo: 133486		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	14	12	24.91	0	57.7	75	125	10.9	20	S
Vanadium	55	12	24.91	31.42	93.0	75	125	24.2	20	R

Sample ID	1207917-005CMS		SampType: MS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-2 (0-0.5')		Batch ID: 3009		RunNo: 4816					
Prep Date:	7/24/2012		Analysis Date: 8/10/2012		SeqNo: 135933		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	23.84	3.961	28.4	75	125			S
Zinc	35	13	23.84	16.80	76.6	75	125			

Sample ID	1207917-005CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-2 (0-0.5')		Batch ID: 3009		RunNo: 4816					
Prep Date:	7/24/2012		Analysis Date: 8/10/2012		SeqNo: 135934		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.91	3.961	34.3	75	125	0	20	S
Zinc	39	13	24.91	16.80	90.3	75	125	11.4	20	

Qualifiers:

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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207917

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207917-006CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-2 (1.5-2.0'	Batch ID: 3107			RunNo: 4816					
Prep Date:	7/31/2012	Analysis Date: 8/10/2012			SeqNo: 135937		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	13	12	24.90	3.628	37.5	75	125			S
Arsenic	24	12	24.90	0	95.2	75	125			
Beryllium	25	0.75	24.90	0.7577	99.3	75	125			
Cadmium	24	0.50	24.90	0	94.7	75	125			
Chromium	37	1.5	24.90	12.12	99.0	75	125			
Cobalt	27	1.5	24.90	3.833	91.0	75	125			
Lead	23	1.2	24.90	4.390	76.5	75	125			
Nickel	30	2.5	24.90	7.255	90.8	75	125			
Selenium	19	12	24.90	0	77.0	75	125			
Silver	4.5	1.2	4.981	0	89.7	75	125			
Vanadium	50	12	24.90	20.97	117	75	125			
Zinc	49	12	24.90	35.46	52.9	75	125			S

Sample ID	1207917-006CMSD	SampType:	MSD		TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-2 (1.5-2.0'		Batch ID:	3107		RunNo:	4816				
Prep Date:	7/31/2012		Analysis Date:	8/10/2012		SeqNo:	135940		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Antimony	ND	12	24.81	3.628	35.3	75	125	200	20	S	
Arsenic	22	12	24.81	0	88.4	75	125	7.79	20		
Beryllium	25	0.75	24.81	0.7577	96.5	75	125	3.15	20		
Cadmium	23	0.50	24.81	0	92.9	75	125	2.30	20		
Chromium	33	1.5	24.81	12.12	84.2	75	125	10.8	20		
Cobalt	26	1.5	24.81	3.833	89.7	75	125	1.59	20		
Lead	23	1.2	24.81	4.390	76.6	75	125	0.134	20		
Nickel	28	2.5	24.81	7.255	82.8	75	125	7.18	20		
Selenium	18	12	24.81	0	70.7	75	125	8.91	20	S	
Silver	4.3	1.2	4.962	0	86.6	75	125	3.84	20		
Vanadium	46	12	24.81	20.97	98.9	75	125	9.82	20		
Zinc	51	12	24.81	35.46	63.8	75	125	5.31	20	S	

Qualifiers:

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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

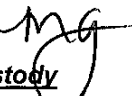
Client Name: Western Refining Gallup

Work Order Number: 1207917

Received by/date:  07/20/12

Logged By: Ashley Gallegos 7/20/2012 7:55:00 AM 

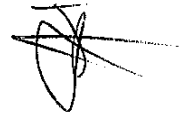
Completed By: Ashley Gallegos 7/20/2012 11:37:29 AM 

Reviewed By:  07/20/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
of preserved bottles checked for pH: 3 2
(<2 or >12 unless noted)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐ Adjusted? ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
Checked by: 

Special Handling (if applicable)

17. 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: _____

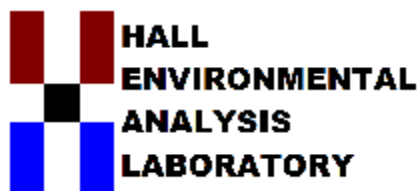
18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

**Metals List for SWMU No. 14 Old API Separator
Gallup Refinery
Western Refining Southwest, Inc.**

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020



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

August 22, 2012

Thurman B. Larsen
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: SWMU NO.14

OrderNo.: 1207922

Dear Thurman B. Larsen:

Hall Environmental Analysis Laboratory received 10 sample(s) on 7/20/2012 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. 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. 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.

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 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1000	200		mg/Kg	20	7/21/2012 11:21:42 PM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/21/2012 11:21:42 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 11:21:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 5:56:39 PM
Surr: BFB	100	84-116		%REC	10	7/26/2012 5:56:39 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.68	0.16		mg/Kg	5	8/3/2012 4:15:31 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	12		mg/Kg	5	8/10/2012 6:49:12 PM
Arsenic	ND	12		mg/Kg	5	8/10/2012 6:49:12 PM
Barium	480	5.0		mg/Kg	50	8/10/2012 6:52:46 PM
Beryllium	ND	0.75		mg/Kg	5	8/10/2012 6:49:12 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:49:12 PM
Chromium	13	1.5		mg/Kg	5	8/10/2012 6:49:12 PM
Cobalt	3.8	1.5		mg/Kg	5	8/10/2012 6:49:12 PM
Iron	14000	500		mg/Kg	500	8/10/2012 6:55:13 PM
Lead	5.5	1.2		mg/Kg	5	8/10/2012 6:49:12 PM
Manganese	1800	5.0		mg/Kg	50	8/10/2012 6:52:46 PM
Nickel	6.3	2.5		mg/Kg	5	8/10/2012 6:49:12 PM
Selenium	ND	12		mg/Kg	5	8/10/2012 6:49:12 PM
Silver	ND	1.2		mg/Kg	5	8/10/2012 6:49:12 PM
Vanadium	18	12		mg/Kg	5	8/10/2012 6:49:12 PM
Zinc	44	12		mg/Kg	5	8/10/2012 6:49:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Acenaphthylene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Aniline	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Anthracene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Azobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	2.6	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Carbazole	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Chrysene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Dibenzofuran	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 9:55:46 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
Fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Fluorene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Hexachloroethane	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
1-Methylnaphthalene	1.5	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2-Methylnaphthalene	1.9	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Naphthalene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 9:55:46 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 9:55:46 AM
Phenanthrene	1.7	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Phenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Pyrene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 9:55:46 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 9:55:46 AM
Surr: 2,4,6-Tribromophenol	107	20.1-121		%REC	1	7/27/2012 9:55:46 AM
Surr: 2-Fluorobiphenyl	94.9	19-133		%REC	1	7/27/2012 9:55:46 AM
Surr: 2-Fluorophenol	96.9	20.2-108		%REC	1	7/27/2012 9:55:46 AM
Surr: 4-Terphenyl-d14	99.7	18.9-115		%REC	1	7/27/2012 9:55:46 AM
Surr: Nitrobenzene-d5	99.1	20.8-123		%REC	1	7/27/2012 9:55:46 AM
Surr: Phenol-d5	87.0	19.8-115		%REC	1	7/27/2012 9:55:46 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Toluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Ethylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Xylenes, Total	2.82	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Methyl tert-butyl ether (MTBE)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,4-Trimethylbenzene	2.00	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,3,5-Trimethylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dichloroethane (EDC)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dibromoethane (EDB)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Naphthalene	18.3	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1-Methylnaphthalene	67.4	3.74		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Methylnaphthalene	107	3.74	E	µg/Kg-dry	1	7/20/2012 2:29:55 PM
Acetone	ND	9.34		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Bromobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Bromodichloromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Bromoform	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Butanone	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Carbon tetrachloride	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Chlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Chloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Chloroform	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Chlorotoluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Carbon disulfide	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
4-Chlorotoluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
cis-1,2-DCE	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
cis-1,3-Dichloropropene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dibromo-3-chloropropane	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Dibromochloromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Dibromomethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,3-Dichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,4-Dichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Dichlorodifluoromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1-Dichloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1-Dichloroethene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2-Dichloropropane	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,3-Dichloropropane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2,2-Dichloropropane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1-Dichloropropene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Hexachlorobutadiene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Isopropylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
4-Isopropyltoluene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Methylene chloride	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
n-Butylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
2-Hexanone	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
n-Propylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
sec-Butylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Styrene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
4-Methyl-2-pentanone	ND	1.87		µg/Kg-dry	1	7/20/2012 2:29:55 PM
tert-Butylbenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,1,2-Tetrachloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,2,2-Tetrachloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Tetrachloroethene (PCE)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
trans-1,2-DCE	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
trans-1,3-Dichloropropene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,3-Trichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,4-Trichlorobenzene	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,1-Trichloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,1,2-Trichloroethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Trichloroethene (TCE)	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Trichlorofluoromethane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
1,2,3-Trichloropropane	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-001

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.934		µg/Kg-dry	1	7/20/2012 2:29:55 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	7/20/2012 2:29:55 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/20/2012 2:29:55 PM
Surr: Dibromofluoromethane	95.9	70-130		%REC	1	7/20/2012 2:29:55 PM
Surr: Toluene-d8	103	70-130		%REC	1	7/20/2012 2:29:55 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5') Dup

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1000	200		mg/Kg	20	7/21/2012 11:43:41 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/21/2012 11:43:41 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 11:43:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 6:25:29 PM
Surr: BFB	99.0	84-116		%REC	10	7/26/2012 6:25:29 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.32	0.033		mg/Kg	1	8/3/2012 4:13:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	12		mg/Kg	5	8/10/2012 6:57:51 PM
Arsenic	ND	12		mg/Kg	5	8/10/2012 6:57:51 PM
Barium	490	5.0		mg/Kg	50	8/10/2012 7:10:33 PM
Beryllium	1.0	0.75		mg/Kg	5	8/10/2012 6:57:51 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 6:57:51 PM
Chromium	22	1.5		mg/Kg	5	8/10/2012 6:57:51 PM
Cobalt	5.9	1.5		mg/Kg	5	8/10/2012 6:57:51 PM
Iron	18000	500		mg/Kg	500	8/10/2012 7:12:57 PM
Lead	40	1.2		mg/Kg	5	8/10/2012 6:57:51 PM
Manganese	460	5.0		mg/Kg	50	8/10/2012 7:10:33 PM
Nickel	11	2.5		mg/Kg	5	8/10/2012 6:57:51 PM
Selenium	ND	12		mg/Kg	5	8/10/2012 6:57:51 PM
Silver	ND	1.2		mg/Kg	5	8/10/2012 6:57:51 PM
Vanadium	29	12		mg/Kg	5	8/10/2012 6:57:51 PM
Zinc	57	12		mg/Kg	5	8/10/2012 6:57:51 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5') Dup

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 10:25:26 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
1-Methylnaphthalene	1.5	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2-Methylnaphthalene	1.7	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5') Dup

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 10:25:26 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:25:26 AM
Phenanthrene	1.9	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 10:25:26 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 10:25:26 AM
Surr: 2,4,6-Tribromophenol	99.4	20.1-121		%REC	1	7/27/2012 10:25:26 AM
Surr: 2-Fluorobiphenyl	94.3	19-133		%REC	1	7/27/2012 10:25:26 AM
Surr: 2-Fluorophenol	94.1	20.2-108		%REC	1	7/27/2012 10:25:26 AM
Surr: 4-Terphenyl-d14	111	18.9-115		%REC	1	7/27/2012 10:25:26 AM
Surr: Nitrobenzene-d5	93.8	20.8-123		%REC	1	7/27/2012 10:25:26 AM
Surr: Phenol-d5	86.6	19.8-115		%REC	1	7/27/2012 10:25:26 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Toluene	1.71	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Ethylbenzene	2.85	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Xylenes, Total	16.8	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,4-Trimethylbenzene	8.95	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,3,5-Trimethylbenzene	2.92	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dichloroethane (EDC)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dibromoethane (EDB)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Naphthalene	47.1	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1-Methylnaphthalene	137	3.91	E	µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Methylnaphthalene	239	3.91	E	µg/Kg-dry	1	7/20/2012 3:32:59 PM
Acetone	ND	9.78		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Bromobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Bromodichloromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Bromoform	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Butanone	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Carbon tetrachloride	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Chlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Chloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Chloroform	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5') Dup

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Carbon disulfide	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
4-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
cis-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
cis-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dibromo-3-chloropropane	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Dibromochloromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Dibromomethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,3-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,4-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Dichlorodifluoromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1-Dichloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1-Dichloroethene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2-Dichloropropane	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,3-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2,2-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Hexachlorobutadiene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Isopropylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
4-Isopropyltoluene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Methylene chloride	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
n-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
2-Hexanone	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
n-Propylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
sec-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Styrene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
4-Methyl-2-pentanone	ND	1.96		µg/Kg-dry	1	7/20/2012 3:32:59 PM
tert-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,1,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,2,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Tetrachloroethene (PCE)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
trans-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
trans-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,3-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,4-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,1-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,1,2-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Trichloroethene (TCE)	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Trichlorofluoromethane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
1,2,3-Trichloropropane	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (0-0.5') Dup

Project: SWMU NO.14

Collection Date: 7/18/2012 4:20:00 PM

Lab ID: 1207922-002

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.978		µg/Kg-dry	1	7/20/2012 3:32:59 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	7/20/2012 3:32:59 PM
Surr: 4-Bromofluorobenzene	80.4	70-130		%REC	1	7/20/2012 3:32:59 PM
Surr: Dibromofluoromethane	95.5	70-130		%REC	1	7/20/2012 3:32:59 PM
Surr: Toluene-d8	108	70-130		%REC	1	7/20/2012 3:32:59 PM

Qualifiers:

- * /X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:30:00 PM

Lab ID: 1207922-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1200	200		mg/Kg	20	7/22/2012 12:05:33 AM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/22/2012 12:05:33 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/22/2012 12:05:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 6:54:16 PM
Surr: BFB	101	84-116		%REC	10	7/26/2012 6:54:16 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.090	0.033		mg/Kg	1	8/3/2012 4:17:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	12		mg/Kg	5	8/10/2012 7:15:32 PM
Arsenic	ND	12		mg/Kg	5	8/10/2012 7:15:32 PM
Barium	500	5.0		mg/Kg	50	8/10/2012 7:17:59 PM
Beryllium	ND	0.75		mg/Kg	5	8/10/2012 7:15:32 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:15:32 PM
Chromium	10	1.5		mg/Kg	5	8/10/2012 7:15:32 PM
Cobalt	3.1	1.5		mg/Kg	5	8/10/2012 7:15:32 PM
Iron	8800	500		mg/Kg	500	8/10/2012 7:20:23 PM
Lead	1.9	1.2		mg/Kg	5	8/10/2012 7:15:32 PM
Manganese	930	5.0		mg/Kg	50	8/10/2012 7:17:59 PM
Nickel	5.9	2.5		mg/Kg	5	8/10/2012 7:15:32 PM
Selenium	ND	12		mg/Kg	5	8/10/2012 7:15:32 PM
Silver	ND	1.2		mg/Kg	5	8/10/2012 7:15:32 PM
Vanadium	19	12		mg/Kg	5	8/10/2012 7:15:32 PM
Zinc	28	12		mg/Kg	5	8/10/2012 7:15:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Acenaphthylene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Aniline	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Anthracene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Azobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:30:00 PM

Lab ID: 1207922-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Carbazole	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Chrysene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Dibenzofuran	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 10:54:46 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
Fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Fluorene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Hexachloroethane	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Naphthalene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:30:00 PM

Lab ID: 1207922-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 10:54:46 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 10:54:46 AM
Phenanthrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Phenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Pyrene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 10:54:46 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 10:54:46 AM
Surr: 2,4,6-Tribromophenol	56.7	20.1-121		%REC	1	7/27/2012 10:54:46 AM
Surr: 2-Fluorobiphenyl	51.0	19-133		%REC	1	7/27/2012 10:54:46 AM
Surr: 2-Fluorophenol	46.7	20.2-108		%REC	1	7/27/2012 10:54:46 AM
Surr: 4-Terphenyl-d14	61.6	18.9-115		%REC	1	7/27/2012 10:54:46 AM
Surr: Nitrobenzene-d5	56.6	20.8-123		%REC	1	7/27/2012 10:54:46 AM
Surr: Phenol-d5	46.0	19.8-115		%REC	1	7/27/2012 10:54:46 AM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Toluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Ethylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,4-Trimethylbenzene	1.5	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Naphthalene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	10	7/21/2012 12:18:50 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	10	7/21/2012 12:18:50 PM
Acetone	ND	7.5		mg/Kg	10	7/21/2012 12:18:50 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Bromoform	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Bromomethane	ND	1.5		mg/Kg	10	7/21/2012 12:18:50 PM
2-Butanone	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Chloroethane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:30:00 PM

Lab ID: 1207922-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Chloromethane	ND	1.5		mg/Kg	10	7/21/2012 12:18:50 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/21/2012 12:18:50 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/21/2012 12:18:50 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Styrene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/21/2012 12:18:50 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:30:00 PM

Lab ID: 1207922-003

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.50		mg/Kg	10	7/21/2012 12:18:50 PM
Xylenes, Total	2.4	1.0		mg/Kg	10	7/21/2012 12:18:50 PM
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	10	7/21/2012 12:18:50 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	10	7/21/2012 12:18:50 PM
Surr: Dibromofluoromethane	89.7	70-130		%REC	10	7/21/2012 12:18:50 PM
Surr: Toluene-d8	104	70-130		%REC	10	7/21/2012 12:18:50 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (4-6')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:40:00 PM

Lab ID: 1207922-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1800	98		mg/Kg	10	7/21/2012 8:25:23 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/21/2012 8:25:23 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/21/2012 8:25:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/26/2012 7:23:02 PM
Surr: BFB	109	84-116		%REC	20	7/26/2012 7:23:02 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:19:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 7:22:58 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:22:58 PM
Barium	200	0.50		mg/Kg	5	8/10/2012 7:22:58 PM
Beryllium	1.1	0.75		mg/Kg	5	8/10/2012 7:22:58 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:22:58 PM
Chromium	12	1.5		mg/Kg	5	8/10/2012 7:22:58 PM
Cobalt	4.9	1.5		mg/Kg	5	8/10/2012 7:22:58 PM
Iron	16000	500		mg/Kg	500	8/10/2012 7:27:49 PM
Lead	2.4	1.3		mg/Kg	5	8/10/2012 7:22:58 PM
Manganese	280	5.0		mg/Kg	50	8/10/2012 7:25:24 PM
Nickel	8.5	2.5		mg/Kg	5	8/10/2012 7:22:58 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:22:58 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:22:58 PM
Vanadium	20	13		mg/Kg	5	8/10/2012 7:22:58 PM
Zinc	17	13		mg/Kg	5	8/10/2012 7:22:58 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (4-6')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:40:00 PM

Lab ID: 1207922-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 11:24:15 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
1-Methylnaphthalene	5.1	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2-Methylnaphthalene	8.0	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Naphthalene	1.8	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM

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- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (4-6')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:40:00 PM

Lab ID: 1207922-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 11:24:15 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 11:24:15 AM
Phenanthrene	1.1	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Phenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 11:24:15 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:24:15 AM
Surr: 2,4,6-Tribromophenol	104	20.1-121		%REC	1	7/27/2012 11:24:15 AM
Surr: 2-Fluorobiphenyl	94.3	19-133		%REC	1	7/27/2012 11:24:15 AM
Surr: 2-Fluorophenol	71.3	20.2-108		%REC	1	7/27/2012 11:24:15 AM
Surr: 4-Terphenyl-d14	95.3	18.9-115		%REC	1	7/27/2012 11:24:15 AM
Surr: Nitrobenzene-d5	94.3	20.8-123		%REC	1	7/27/2012 11:24:15 AM
Surr: Phenol-d5	102	19.8-115		%REC	1	7/27/2012 11:24:15 AM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	0.69	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Toluene	2.8	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Ethylbenzene	1.1	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,4-Trimethylbenzene	3.2	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,3,5-Trimethylbenzene	0.92	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Naphthalene	1.1	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1-Methylnaphthalene	2.9	2.0		mg/Kg	10	7/21/2012 1:15:52 PM
2-Methylnaphthalene	4.7	2.0		mg/Kg	10	7/21/2012 1:15:52 PM
Acetone	ND	7.5		mg/Kg	10	7/21/2012 1:15:52 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Bromoform	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Bromomethane	ND	1.5		mg/Kg	10	7/21/2012 1:15:52 PM
2-Butanone	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Chloroethane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (4-6')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:40:00 PM

Lab ID: 1207922-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Chloromethane	ND	1.5		mg/Kg	10	7/21/2012 1:15:52 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/21/2012 1:15:52 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/21/2012 1:15:52 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
n-Propylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Styrene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/21/2012 1:15:52 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (4-6')

Project: SWMU NO.14

Collection Date: 7/18/2012 4:40:00 PM

Lab ID: 1207922-004

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.50		mg/Kg	10	7/21/2012 1:15:52 PM
Xylenes, Total	5.6	1.0		mg/Kg	10	7/21/2012 1:15:52 PM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	10	7/21/2012 1:15:52 PM
Surr: 4-Bromofluorobenzene	85.3	70-130		%REC	10	7/21/2012 1:15:52 PM
Surr: Dibromofluoromethane	95.5	70-130		%REC	10	7/21/2012 1:15:52 PM
Surr: Toluene-d8	103	70-130		%REC	10	7/21/2012 1:15:52 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (13-14')

Project: SWMU NO.14

Collection Date: 7/18/2012 5:00:00 PM

Lab ID: 1207922-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/21/2012 6:34:36 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/21/2012 6:34:36 PM
Surr: DNOP	117	77.6-140		%REC	1	7/21/2012 6:34:36 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/26/2012 7:51:46 PM
Surr: BFB	101	84-116		%REC	1	7/26/2012 7:51:46 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:20:55 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 7:30:27 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:30:27 PM
Barium	190	0.50		mg/Kg	5	8/10/2012 7:30:27 PM
Beryllium	1.3	0.75		mg/Kg	5	8/10/2012 7:30:27 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:30:27 PM
Chromium	19	1.5		mg/Kg	5	8/10/2012 7:30:27 PM
Cobalt	6.5	1.5		mg/Kg	5	8/10/2012 7:30:27 PM
Iron	23000	500		mg/Kg	500	8/10/2012 7:45:36 PM
Lead	ND	1.3		mg/Kg	5	8/10/2012 7:30:27 PM
Manganese	460	5.0		mg/Kg	50	8/10/2012 7:32:53 PM
Nickel	13	2.5		mg/Kg	5	8/10/2012 7:30:27 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:30:27 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:30:27 PM
Vanadium	29	13		mg/Kg	5	8/10/2012 7:30:27 PM
Zinc	27	13		mg/Kg	5	8/10/2012 7:30:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (13-14')

Project: SWMU NO.14

Collection Date: 7/18/2012 5:00:00 PM

Lab ID: 1207922-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 11:53:38 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (13-14')

Project: SWMU NO.14

Collection Date: 7/18/2012 5:00:00 PM

Lab ID: 1207922-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 11:53:38 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 11:53:38 AM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 11:53:38 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 11:53:38 AM
Surr: 2,4,6-Tribromophenol	90.0	20.1-121		%REC	1	7/27/2012 11:53:38 AM
Surr: 2-Fluorobiphenyl	79.1	19-133		%REC	1	7/27/2012 11:53:38 AM
Surr: 2-Fluorophenol	78.2	20.2-108		%REC	1	7/27/2012 11:53:38 AM
Surr: 4-Terphenyl-d14	82.5	18.9-115		%REC	1	7/27/2012 11:53:38 AM
Surr: Nitrobenzene-d5	80.4	20.8-123		%REC	1	7/27/2012 11:53:38 AM
Surr: Phenol-d5	80.3	19.8-115		%REC	1	7/27/2012 11:53:38 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Toluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Ethylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Xylenes, Total	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Methyl tert-butyl ether (MTBE)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,4-Trimethylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,3,5-Trimethylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dichloroethane (EDC)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dibromoethane (EDB)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Naphthalene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1-Methylnaphthalene	ND	4.56		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Methylnaphthalene	ND	4.56		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Acetone	ND	11.4		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Bromobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Bromodichloromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Bromoform	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Butanone	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Carbon tetrachloride	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Chlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Chloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Chloroform	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (13-14')

Project: SWMU NO.14

Collection Date: 7/18/2012 5:00:00 PM

Lab ID: 1207922-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Chlorotoluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Carbon disulfide	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
4-Chlorotoluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
cis-1,2-DCE	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
cis-1,3-Dichloropropene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dibromo-3-chloropropane	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Dibromochloromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Dibromomethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,3-Dichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,4-Dichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Dichlorodifluoromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1-Dichloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1-Dichloroethene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2-Dichloropropane	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,3-Dichloropropane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2,2-Dichloropropane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1-Dichloropropene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Hexachlorobutadiene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Isopropylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
4-Isopropyltoluene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Methylene chloride	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
n-Butylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
2-Hexanone	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
n-Propylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
sec-Butylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Styrene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
4-Methyl-2-pentanone	ND	2.28		µg/Kg-dry	1	7/20/2012 5:34:03 PM
tert-Butylbenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,1,2-Tetrachloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,2,2-Tetrachloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Tetrachloroethene (PCE)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
trans-1,2-DCE	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
trans-1,3-Dichloropropene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,3-Trichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,4-Trichlorobenzene	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,1-Trichloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,1,2-Trichloroethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Trichloroethene (TCE)	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Trichlorofluoromethane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
1,2,3-Trichloropropane	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-9 (13-14')

Project: SWMU NO.14

Collection Date: 7/18/2012 5:00:00 PM

Lab ID: 1207922-005

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.14		µg/Kg-dry	1	7/20/2012 5:34:03 PM
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	7/20/2012 5:34:03 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	7/20/2012 5:34:03 PM
Surr: Dibromofluoromethane	89.3	70-130		%REC	1	7/20/2012 5:34:03 PM
Surr: Toluene-d8	101	70-130		%REC	1	7/20/2012 5:34:03 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:30:00 PM

Lab ID: 1207922-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	3900	200		mg/Kg	20	7/21/2012 9:31:35 PM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/21/2012 9:31:35 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 9:31:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/26/2012 8:20:29 PM
Surr: BFB	102	84-116		%REC	50	7/26/2012 8:20:29 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:26:17 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 7:48:14 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:48:14 PM
Barium	650	5.0		mg/Kg	50	8/10/2012 7:50:38 PM
Beryllium	0.76	0.75		mg/Kg	5	8/10/2012 7:48:14 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:48:14 PM
Chromium	9.6	1.5		mg/Kg	5	8/10/2012 7:48:14 PM
Cobalt	4.1	1.5		mg/Kg	5	8/10/2012 7:48:14 PM
Iron	15000	500		mg/Kg	500	8/10/2012 7:53:02 PM
Lead	3.5	1.3		mg/Kg	5	8/10/2012 7:48:14 PM
Manganese	600	5.0		mg/Kg	50	8/10/2012 7:50:38 PM
Nickel	6.8	2.5		mg/Kg	5	8/10/2012 7:48:14 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:48:14 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:48:14 PM
Vanadium	22	13		mg/Kg	5	8/10/2012 7:48:14 PM
Zinc	30	13		mg/Kg	5	8/10/2012 7:48:14 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:30:00 PM

Lab ID: 1207922-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 12:23:05 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:30:00 PM

Lab ID: 1207922-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 12:23:05 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 12:23:05 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 12:23:05 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 12:23:05 PM
Surr: 2,4,6-Tribromophenol	116	20.1-121		%REC	1	7/27/2012 12:23:05 PM
Surr: 2-Fluorobiphenyl	96.1	19-133		%REC	1	7/27/2012 12:23:05 PM
Surr: 2-Fluorophenol	107	20.2-108		%REC	1	7/27/2012 12:23:05 PM
Surr: 4-Terphenyl-d14	113	18.9-115		%REC	1	7/27/2012 12:23:05 PM
Surr: Nitrobenzene-d5	125	20.8-123	S	%REC	1	7/27/2012 12:23:05 PM
Surr: Phenol-d5	106	19.8-115		%REC	1	7/27/2012 12:23:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,4-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Naphthalene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 8:18:11 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 8:18:11 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:30:00 PM

Lab ID: 1207922-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 8:18:11 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 8:18:11 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:30:00 PM

Lab ID: 1207922-006

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 8:18:11 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/23/2012 8:18:11 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	20	7/23/2012 8:18:11 PM
Surr: 4-Bromofluorobenzene	77.1	70-130		%REC	20	7/23/2012 8:18:11 PM
Surr: Dibromofluoromethane	99.6	70-130		%REC	20	7/23/2012 8:18:11 PM
Surr: Toluene-d8	100	70-130		%REC	20	7/23/2012 8:18:11 PM

Qualifiers:

* / X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:50:00 PM

Lab ID: 1207922-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	2100	97		mg/Kg	10	7/21/2012 8:47:31 PM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/21/2012 8:47:31 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/21/2012 8:47:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/26/2012 8:49:13 PM
Surr: BFB	111	84-116		%REC	10	7/26/2012 8:49:13 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:28:08 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
Barium	550	5.0		mg/Kg	50	8/10/2012 7:58:01 PM
Beryllium	ND	0.75		mg/Kg	5	8/10/2012 7:55:37 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 7:55:37 PM
Chromium	7.1	1.5		mg/Kg	5	8/10/2012 7:55:37 PM
Cobalt	3.7	1.5		mg/Kg	5	8/10/2012 7:55:37 PM
Iron	11000	500		mg/Kg	500	8/10/2012 8:00:26 PM
Lead	3.2	1.3		mg/Kg	5	8/10/2012 7:55:37 PM
Manganese	1100	5.0		mg/Kg	50	8/10/2012 7:58:01 PM
Nickel	5.6	2.5		mg/Kg	5	8/10/2012 7:55:37 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 7:55:37 PM
Vanadium	18	13		mg/Kg	5	8/10/2012 7:55:37 PM
Zinc	ND	13		mg/Kg	5	8/10/2012 7:55:37 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:50:00 PM

Lab ID: 1207922-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 12:52:32 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Naphthalene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:50:00 PM

Lab ID: 1207922-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Nitroaniline	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 12:52:32 PM
Pentachlorophenol	ND	0.81		mg/Kg	1	7/27/2012 12:52:32 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Phenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 12:52:32 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 12:52:32 PM
Surr: 2,4,6-Tribromophenol	44.6	20.1-121		%REC	1	7/27/2012 12:52:32 PM
Surr: 2-Fluorobiphenyl	39.7	19-133		%REC	1	7/27/2012 12:52:32 PM
Surr: 2-Fluorophenol	40.4	20.2-108		%REC	1	7/27/2012 12:52:32 PM
Surr: 4-Terphenyl-d14	44.0	18.9-115		%REC	1	7/27/2012 12:52:32 PM
Surr: Nitrobenzene-d5	43.0	20.8-123		%REC	1	7/27/2012 12:52:32 PM
Surr: Phenol-d5	37.9	19.8-115		%REC	1	7/27/2012 12:52:32 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	12.6	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Toluene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Ethylbenzene	6.91	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Xylenes, Total	7.95	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Methyl tert-butyl ether (MTBE)	10.2	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,4-Trimethylbenzene	5.62	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,3,5-Trimethylbenzene	4.87	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dichloroethane (EDC)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dibromoethane (EDB)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Naphthalene	2.18	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1-Methylnaphthalene	5.02	3.59		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Methylnaphthalene	4.02	3.59		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Acetone	ND	8.98		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Bromobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Bromodichloromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Bromoform	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Butanone	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Carbon tetrachloride	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Chlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Chloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Chloroform	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
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- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:50:00 PM

Lab ID: 1207922-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Chlorotoluene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Carbon disulfide	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
4-Chlorotoluene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
cis-1,2-DCE	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
cis-1,3-Dichloropropene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dibromo-3-chloropropane	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Dibromochloromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Dibromomethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,3-Dichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,4-Dichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Dichlorodifluoromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1-Dichloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1-Dichloroethene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2-Dichloropropane	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,3-Dichloropropane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2,2-Dichloropropane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1-Dichloropropene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Hexachlorobutadiene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Isopropylbenzene	2.08	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
4-Isopropyltoluene	1.70	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Methylene chloride	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
n-Butylbenzene	1.16	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
2-Hexanone	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
n-Propylbenzene	2.57	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
sec-Butylbenzene	2.03	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Styrene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
4-Methyl-2-pentanone	ND	1.80		µg/Kg-dry	1	7/20/2012 6:34:19 PM
tert-Butylbenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,1,2-Tetrachloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,2,2-Tetrachloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Tetrachloroethene (PCE)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
trans-1,2-DCE	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
trans-1,3-Dichloropropene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,3-Trichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,4-Trichlorobenzene	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,1-Trichloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,1,2-Trichloroethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Trichloroethene (TCE)	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Trichlorofluoromethane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
1,2,3-Trichloropropane	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (1.5-2')

Project: SWMU NO.14

Collection Date: 7/18/2012 6:50:00 PM

Lab ID: 1207922-007

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.898		µg/Kg-dry	1	7/20/2012 6:34:19 PM
Surr: 1,2-Dichloroethane-d4	108	70-130		%REC	1	7/20/2012 6:34:19 PM
Surr: 4-Bromofluorobenzene	130	70-130	S	%REC	1	7/20/2012 6:34:19 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	7/20/2012 6:34:19 PM
Surr: Toluene-d8	93.1	70-130		%REC	1	7/20/2012 6:34:19 PM

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- RL Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (6-8')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:10:00 PM

Lab ID: 1207922-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1000	100		mg/Kg	10	7/21/2012 9:09:30 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/21/2012 9:09:30 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/21/2012 9:09:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	150	50		mg/Kg	10	7/27/2012 1:36:24 AM
Surr: BFB	187	84-116	S	%REC	10	7/27/2012 1:36:24 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:29:56 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 8:03:02 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 8:03:02 PM
Barium	2400	5.0		mg/Kg	50	8/10/2012 8:05:24 PM
Beryllium	1.2	0.75		mg/Kg	5	8/10/2012 8:03:02 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 8:03:02 PM
Chromium	14	1.5		mg/Kg	5	8/10/2012 8:03:02 PM
Cobalt	6.0	1.5		mg/Kg	5	8/10/2012 8:03:02 PM
Iron	20000	500		mg/Kg	500	8/10/2012 8:07:51 PM
Lead	2.6	1.3		mg/Kg	5	8/10/2012 8:03:02 PM
Manganese	400	5.0		mg/Kg	50	8/10/2012 8:05:24 PM
Nickel	11	2.5		mg/Kg	5	8/10/2012 8:03:02 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 8:03:02 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 8:03:02 PM
Vanadium	27	13		mg/Kg	5	8/10/2012 8:03:02 PM
Zinc	22	13		mg/Kg	5	8/10/2012 8:03:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM

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- B Analyte detected in the associated Method Blank
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (6-8')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:10:00 PM

Lab ID: 1207922-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 2:20:48 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
1-Methylnaphthalene	6.5	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2-Methylnaphthalene	9.2	2.0		mg/Kg	5	7/30/2012 4:35:23 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Naphthalene	2.2	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (6-8')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:10:00 PM

Lab ID: 1207922-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 2:20:48 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 2:20:48 PM
Phenanthrene	2.0	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Phenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 2:20:48 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 2:20:48 PM
Surr: 2,4,6-Tribromophenol	71.5	20.1-121		%REC	1	7/27/2012 2:20:48 PM
Surr: 2-Fluorobiphenyl	64.8	19-133		%REC	1	7/27/2012 2:20:48 PM
Surr: 2-Fluorophenol	70.7	20.2-108		%REC	1	7/27/2012 2:20:48 PM
Surr: 4-Terphenyl-d14	84.2	18.9-115		%REC	1	7/27/2012 2:20:48 PM
Surr: Nitrobenzene-d5	85.1	20.8-123		%REC	1	7/27/2012 2:20:48 PM
Surr: Phenol-d5	79.9	19.8-115		%REC	1	7/27/2012 2:20:48 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Toluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Ethylbenzene	3.1	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,4-Trimethylbenzene	12	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,3,5-Trimethylbenzene	1.7	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Naphthalene	3.9	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1-Methylnaphthalene	7.2	4.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Methylnaphthalene	12	4.0		mg/Kg	20	7/23/2012 9:14:46 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 9:14:46 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (6-8')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:10:00 PM

Lab ID: 1207922-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 9:14:46 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 9:14:46 PM
n-Butylbenzene	1.6	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
n-Propylbenzene	2.0	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 9:14:46 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (6-8")

Project: SWMU NO.14

Collection Date: 7/18/2012 7:10:00 PM

Lab ID: 1207922-008

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 9:14:46 PM
Xylenes, Total	8.1	2.0		mg/Kg	20	7/23/2012 9:14:46 PM
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	20	7/23/2012 9:14:46 PM
Surr: 4-Bromofluorobenzene	77.4	70-130		%REC	20	7/23/2012 9:14:46 PM
Surr: Dibromofluoromethane	106	70-130		%REC	20	7/23/2012 9:14:46 PM
Surr: Toluene-d8	102	70-130		%REC	20	7/23/2012 9:14:46 PM

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (23.5-24')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:20:00 PM

Lab ID: 1207922-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/21/2012 6:56:50 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/21/2012 6:56:50 PM
Surr: DNOP	115	77.6-140		%REC	1	7/21/2012 6:56:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/27/2012 2:05:10 AM
Surr: BFB	107	84-116		%REC	1	7/27/2012 2:05:10 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/3/2012 4:31:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	8/10/2012 8:22:31 PM
Arsenic	ND	13		mg/Kg	5	8/10/2012 8:22:31 PM
Barium	350	5.0		mg/Kg	50	8/10/2012 8:24:57 PM
Beryllium	1.2	0.75		mg/Kg	5	8/10/2012 8:22:31 PM
Cadmium	ND	0.50		mg/Kg	5	8/10/2012 8:22:31 PM
Chromium	17	1.5		mg/Kg	5	8/10/2012 8:22:31 PM
Cobalt	7.6	1.5		mg/Kg	5	8/10/2012 8:22:31 PM
Iron	21000	500		mg/Kg	500	8/22/2012 7:45:41 AM
Lead	ND	1.3		mg/Kg	5	8/10/2012 8:22:31 PM
Manganese	740	5.0		mg/Kg	50	8/10/2012 8:24:57 PM
Nickel	16	2.5		mg/Kg	5	8/10/2012 8:22:31 PM
Selenium	ND	13		mg/Kg	5	8/10/2012 8:22:31 PM
Silver	ND	1.3		mg/Kg	5	8/10/2012 8:22:31 PM
Vanadium	16	13		mg/Kg	5	8/10/2012 8:22:31 PM
Zinc	25	13		mg/Kg	5	8/10/2012 8:22:31 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Aniline	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Anthracene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Azobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (23.5-24')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:20:00 PM

Lab ID: 1207922-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Carbazole	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Chrysene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/27/2012 3:49:13 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Fluorene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Isophorone	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Naphthalene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (23.5-24')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:20:00 PM

Lab ID: 1207922-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/27/2012 3:49:13 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/27/2012 3:49:13 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Phenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Pyrene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Pyridine	ND	0.50		mg/Kg	1	7/27/2012 3:49:13 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/27/2012 3:49:13 PM
Surr: 2,4,6-Tribromophenol	71.0	20.1-121		%REC	1	7/27/2012 3:49:13 PM
Surr: 2-Fluorobiphenyl	60.0	19-133		%REC	1	7/27/2012 3:49:13 PM
Surr: 2-Fluorophenol	54.8	20.2-108		%REC	1	7/27/2012 3:49:13 PM
Surr: 4-Terphenyl-d14	68.7	18.9-115		%REC	1	7/27/2012 3:49:13 PM
Surr: Nitrobenzene-d5	55.0	20.8-123		%REC	1	7/27/2012 3:49:13 PM
Surr: Phenol-d5	58.5	19.8-115		%REC	1	7/27/2012 3:49:13 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Toluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Ethylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Xylenes, Total	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dibromoethane (EDB)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Naphthalene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1-Methylnaphthalene	ND	4.02		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Methylnaphthalene	ND	4.02		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Acetone	ND	10.0		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Bromobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Bromodichloromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Bromoform	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Butanone	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Carbon tetrachloride	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Chlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Chloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Chloroform	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (23.5-24')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:20:00 PM

Lab ID: 1207922-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Chlorotoluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Carbon disulfide	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
4-Chlorotoluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
cis-1,2-DCE	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
cis-1,3-Dichloropropene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dibromo-3-chloropropane	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Dibromochloromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Dibromomethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,3-Dichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,4-Dichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Dichlorodifluoromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1-Dichloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1-Dichloroethene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2-Dichloropropane	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,3-Dichloropropane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2,2-Dichloropropane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1-Dichloropropene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Hexachlorobutadiene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Isopropylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
4-Isopropyltoluene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Methylene chloride	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
n-Butylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
2-Hexanone	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
n-Propylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
sec-Butylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Styrene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
4-Methyl-2-pentanone	ND	2.01		µg/Kg-dry	1	7/20/2012 8:04:07 PM
tert-Butylbenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Tetrachloroethene (PCE)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
trans-1,2-DCE	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
trans-1,3-Dichloropropene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,3-Trichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,4-Trichlorobenzene	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,1-Trichloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,1,2-Trichloroethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Trichloroethene (TCE)	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Trichlorofluoromethane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
1,2,3-Trichloropropane	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SMWU 14-7 (23.5-24')

Project: SWMU NO.14

Collection Date: 7/18/2012 7:20:00 PM

Lab ID: 1207922-009

Matrix: SOIL

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.00		µg/Kg-dry	1	7/20/2012 8:04:07 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	7/20/2012 8:04:07 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1	7/20/2012 8:04:07 PM
Surr: Dibromofluoromethane	90.0	70-130		%REC	1	7/20/2012 8:04:07 PM
Surr: Toluene-d8	100	70-130		%REC	1	7/20/2012 8:04:07 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 7:45:00 PM

Lab ID: 1207922-010

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 7:25:44 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 7:25:44 PM
Surr: DNOP	127	79.5-166		%REC	1	7/23/2012 7:25:44 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 12:38:13 AM
Surr: BFB	94.7	69.8-119		%REC	1	7/25/2012 12:38:13 AM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Beryllium	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Cadmium	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Chromium	ND	0.0060		mg/L	1	8/20/2012 11:03:35 AM
Cobalt	ND	0.0060		mg/L	1	8/17/2012 12:49:03 PM
Iron	ND	0.020		mg/L	1	8/17/2012 12:49:03 PM
Manganese	ND	0.0020		mg/L	1	8/17/2012 12:49:03 PM
Nickel	ND	0.010		mg/L	1	8/20/2012 11:03:35 AM
Silver	ND	0.0050		mg/L	1	8/17/2012 12:49:03 PM
Vanadium	ND	0.050		mg/L	1	8/17/2012 12:49:03 PM
Zinc	ND	0.010		mg/L	1	8/20/2012 11:03:35 AM
EPA 200.8: METALS						Analyst: SNV
Antimony	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
Arsenic	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
Lead	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
Selenium	ND	0.0010		mg/L	1	7/31/2012 6:44:16 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	7/24/2012 11:01:25 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Aniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Anthracene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 1:15:31 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 1:15:31 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 7:45:00 PM

Lab ID: 1207922-010

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Carbazole	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Chrysene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Fluorene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Isophorone	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 1:15:31 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 7:45:00 PM

Lab ID: 1207922-010

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 1:15:31 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 1:15:31 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Phenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Pyrene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Pyridine	ND	10		µg/L	1	7/25/2012 1:15:31 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:15:31 PM
Surr: 2,4,6-Tribromophenol	52.7	44.2-126		%REC	1	7/25/2012 1:15:31 PM
Surr: 2-Fluorobiphenyl	51.7	37-114		%REC	1	7/25/2012 1:15:31 PM
Surr: 2-Fluorophenol	28.7	23.4-98		%REC	1	7/25/2012 1:15:31 PM
Surr: 4-Terphenyl-d14	68.2	41.3-116		%REC	1	7/25/2012 1:15:31 PM
Surr: Nitrobenzene-d5	51.5	39.5-118		%REC	1	7/25/2012 1:15:31 PM
Surr: Phenol-d5	29.2	20.9-95.9		%REC	1	7/25/2012 1:15:31 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 12:54:27 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 12:54:27 AM
Acetone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 12:54:27 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 12:54:27 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 7:45:00 PM

Lab ID: 1207922-010

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 12:54:27 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 12:54:27 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 12:54:27 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207922

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071812

Project: SWMU NO.14

Collection Date: 7/18/2012 7:45:00 PM

Lab ID: 1207922-010

Matrix: AQUEOUS

Received Date: 7/20/2012 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 12:54:27 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 12:54:27 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 12:54:27 AM
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	7/25/2012 12:54:27 AM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	7/25/2012 12:54:27 AM
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/25/2012 12:54:27 AM
Surr: Toluene-d8	105	70-130		%REC	1	7/25/2012 12:54:27 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

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 #: 120724076
Project Name: 1207922

Analytical Results Report

Sample Number	120724076-001	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-001D / SMW 14-9 (0-0.5)			Sampling Time	4:20 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	4.4	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-002	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-002D / SMW 14-9 (0-0.5) DUP			Sampling Time	4:20 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.04	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	3.6	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-003	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-003D / SMW 14-9 (1.5-2)			Sampling Time	4:30 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	13.3	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-004	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-004D / SMW 14-9 (4-6)			Sampling Time	4:40 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	17.8	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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

Batch #: 120724076
Project Name: 1207922

Analytical Results Report

Sample Number	120724076-005	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-005D / SMW 14-9 (13-14)			Sampling Time	5:00 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	16.9	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-006	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-006D / SMW 14-7 (0-0.5)			Sampling Time	6:30 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	10.3	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-007	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-007D / SMW 14-7 (1.5-2)			Sampling Time	6:50 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	12.4	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-008	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-008D / SMW 14-7 (6-8)			Sampling Time	7:10 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	16.1	Percent		7/31/2012	CRW	%moisture	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C595; MT:Cert0095

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

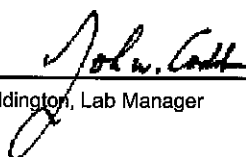
Batch #: 120724076
Project Name: 1207922

Analytical Results Report

Sample Number	120724076-009	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-009D / SMW 14-7 (23.5-24)			Sampling Time	7:20 PM		
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	
%moisture	11.4	Percent		7/31/2012	CRW	%moisture	

Sample Number	120724076-010	Sampling Date	7/18/2012	Date/Time Received	7/24/2012	1:00 PM	
Client Sample ID	1207922-010F / EB071812			Sampling Time	7:45 PM		
Matrix	Water						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	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.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, August 03, 2012

Page 3 of 3

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R4938		RunNo:	4938			
Prep Date:			Analysis Date:	8/17/2012		SeqNo:	139688	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Vanadium	ND	0.050								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	R4938		RunNo:	4938			
Prep Date:			Analysis Date:	8/17/2012		SeqNo:	139689	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0.0005000	98.2	85	115			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.6	85	115			
Iron	0.48	0.020	0.5000	0	96.8	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.097	0.0050	0.1000	0	96.9	85	115			
Vanadium	0.50	0.050	0.5000	0	101	85	115			

Sample ID	1207807-002BMS		SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	R4938		RunNo:	4938			
Prep Date:			Analysis Date:	8/17/2012		SeqNo:	139709	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.60	0.0020	0.5000	0.08916	102	70	130			

Sample ID	1207807-002BMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	R4938		RunNo:	4938			
Prep Date:			Analysis Date:	8/17/2012		SeqNo:	139710	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.59	0.0020	0.5000	0.08916	99.9	70	130	1.42	20	

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R4970		RunNo:	4970			
Prep Date:			Analysis Date:	8/20/2012		SeqNo:	140607	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R4970			RunNo: 4970					
Prep Date:		Analysis Date: 8/20/2012			SeqNo: 140607		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Nickel	ND	0.010								
Zinc	ND	0.010								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: R4970		RunNo: 4970					
Prep Date:			Analysis Date: 8/20/2012		SeqNo: 140608		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.0	85	115			
Nickel	0.46	0.010	0.5000	0	92.5	85	115			
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID	1207B81-004AMS		SampType: MS		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R4970		RunNo: 4970					
Prep Date:			Analysis Date: 8/20/2012		SeqNo: 140624		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.3	70	130			
Nickel	0.44	0.010	0.5000	0	88.9	70	130			
Zinc	0.47	0.010	0.5000	0.009760	92.7	70	130			

Sample ID	1207B81-004AMSD		SampType: MSD		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R4970		RunNo: 4970					
Prep Date:			Analysis Date: 8/20/2012		SeqNo: 140625		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.5	70	130	0.186	20	
Nickel	0.44	0.010	0.5000	0	88.8	70	130	0.0540	20	
Zinc	0.47	0.010	0.5000	0.009760	92.2	70	130	0.517	20	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207508-003AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128501		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.033	0.0010	0.02500	0.008736	97.7	70	130			

Sample ID	1207608-004AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128507		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	70	130			
Arsenic	0.025	0.0010	0.02500	0	99.9	70	130			
Selenium	0.025	0.0010	0.02500	0	102	70	130			

Sample ID	1207806-004AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128522		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.025	0.0010	0.02500	0	100	70	130			
Selenium	0.029	0.0010	0.02500	0.004090	98.9	70	130			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128780		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.028	0.0010	0.02500	0	112	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4578		RunNo: 4578					
Prep Date:			Analysis Date: 7/31/2012		SeqNo: 128781		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.024	0.0010	0.02500	0	97.4	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Metals					
Client ID:	PBW	Batch ID:	R4578	RunNo:	4578					
Prep Date:		Analysis Date:	7/31/2012	SeqNo:	128782	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Metals					
Client ID:	PBW	Batch ID:	R4578	RunNo:	4578					
Prep Date:		Analysis Date:	7/31/2012	SeqNo:	128784	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2980		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122215		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-2980		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122216		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.7	80	120			

Sample ID	1207906-001BMS		SampType: MS		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 2980		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122218		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.1	75	125			

Sample ID	1207906-001BMSD			SampType:	MSD		TestCode:	EPA Method 245.1: Mercury			
Client ID:	BatchQC			Batch ID:	2980		RunNo:	4384			
Prep Date:	7/23/2012			Analysis Date:	7/24/2012		SeqNo:	122219		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0050	0.00020	0.005000	0	99.4	75	125	0.305	20		

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2936	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2936			RunNo: 4208					
Prep Date:	7/20/2012	Analysis Date: 7/21/2012			SeqNo: 120444		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	12		10.00		117	77.6	140			

Sample ID	LCS-2936		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2936		RunNo: 4208					
Prep Date:	7/20/2012		Analysis Date: 7/21/2012		SeqNo: 120445		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.5	52.6	130			
Surr: DNOP	4.6		5.000		91.7	77.6	140			

Sample ID	MB-2946	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2946			RunNo: 4221					
Prep Date:	7/21/2012	Analysis Date: 7/22/2012			SeqNo: 120621		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	77.6	140			

Sample ID	MB-2947		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 2947		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120622		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		111	77.6	140			

Sample ID	LCS-2946		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2946		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120623		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.5	77.6	140			

Sample ID	LCS-2947		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2947		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120624		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.1	77.6	140			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207838-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	2946	RunNo:	4221					
Prep Date:	7/21/2012	Analysis Date:	7/22/2012	SeqNo:	120626	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.873		89.6	77.6	140			

Sample ID	1207838-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	2946	RunNo:	4221					
Prep Date:	7/21/2012	Analysis Date:	7/22/2012	SeqNo:	120627	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		4.955		88.1	77.6	140	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2965	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW	Batch ID: 2965			RunNo: 4229					
Prep Date:	7/23/2012	Analysis Date: 7/23/2012			SeqNo: 121391		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		123	79.5	166			

Sample ID	LCS-2965		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 2965		RunNo: 4229					
Prep Date:	7/23/2012		Analysis Date: 7/23/2012		SeqNo: 121392		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.0	74	157			
Surr: DNOP	0.51		0.5000		102	79.5	166			

Sample ID	LCSD-2965		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 2965		RunNo: 4229					
Prep Date:	7/23/2012		Analysis Date: 7/23/2012		SeqNo: 121393		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.9	74	157	0.931	23	
Surr: DNOP	0.53		0.5000		106	79.5	166	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3010		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124694		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		99.6	84	116			

Sample ID	LCS-3010		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124695		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	85	115			
Surr: BFB	1100		1000		108	84	116			

Sample ID	1207A15-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124697		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.61	3.490	84.9	70	130			
Surr: BFB	1100		944.3		112	84	116			

Sample ID	1207A15-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124698		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.58	3.490	83.3	70	130	1.63	22.1	
Surr: BFB	1100		943.4		113	84	116	0	0	

Qualifiers:

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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID: R4409			RunNo: 4409					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122827		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSW		Batch ID: R4409		RunNo: 4409					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122828		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID	1207819-004AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4409		RunNo: 4409					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122835		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID	1207819-004AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R4409		RunNo: 4409					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122836		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b5	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/21/2012	SeqNo:	121267	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								
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

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E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b5	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121267		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.050								
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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121268		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	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs2		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121268	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID	1207900-002b ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121269	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID	1207900-002b msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121270	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122014	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								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
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: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122015	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	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207940-007b ms		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4379		RunNo: 4379					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID	1207940-007b msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4379		RunNo: 4379					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122017		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Sample ID	mb-3010		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS		Batch ID: 3010		RunNo: 4468					
Prep Date:	7/24/2012		Analysis Date: 7/25/2012		SeqNo: 125366		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID	lcs-3010		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 3010		RunNo: 4468					
Prep Date:	7/24/2012		Analysis Date: 7/25/2012		SeqNo: 125367		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	lcs-3010		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 3010		RunNo: 4468					
Prep Date:	7/24/2012		Analysis Date: 7/25/2012		SeqNo: 125367		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID	mb-3010		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS		Batch ID: 3010		RunNo: 4498					
Prep Date:	7/24/2012		Analysis Date: 7/27/2012		SeqNo: 126123		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.7	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.5000		118	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2930	SampType:	MBLK	TestCode:	Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS	Batch ID:	2930	RunNo:	4215					
Prep Date:	7/20/2012	Analysis Date:	7/20/2012	SeqNo:	120455	Units:	µg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.00								
Toluene	ND	1.00								
Ethylbenzene	ND	1.00								
Xylenes, Total	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	1.00								
1,2,4-Trimethylbenzene	ND	1.00								
1,3,5-Trimethylbenzene	ND	1.00								
1,2-Dichloroethane (EDC)	ND	1.00								
1,2-Dibromoethane (EDB)	ND	1.00								
Naphthalene	ND	1.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	1.00								
Bromodichloromethane	ND	1.00								
Bromoform	ND	1.00								
2-Butanone	ND	2.00								
Carbon tetrachloride	ND	1.00								
Chlorobenzene	ND	1.00								
Chloroethane	ND	1.00								
Chloroform	ND	1.00								
Chloromethane	ND	1.00								
2-Chlorotoluene	ND	1.00								
Carbon disulfide	ND	2.00								
4-Chlorotoluene	ND	1.00								
cis-1,2-DCE	ND	1.00								
cis-1,3-Dichloropropene	ND	1.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	1.00								
Dibromomethane	ND	1.00								
1,2-Dichlorobenzene	ND	1.00								
1,3-Dichlorobenzene	ND	1.00								
1,4-Dichlorobenzene	ND	1.00								
Dichlorodifluoromethane	ND	1.00								
1,1-Dichloroethane	ND	1.00								
1,1-Dichloroethene	ND	1.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	1.00								
2,2-Dichloropropane	ND	1.00								
1,1-Dichloropropene	ND	1.00								
Hexachlorobutadiene	ND	1.00								

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2930		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 2930			RunNo: 4215				
Prep Date:	7/20/2012		Analysis Date: 7/20/2012			SeqNo: 120455 Units: µg/Kg-dry				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.00								
4-Isopropyltoluene	ND	1.00								
Methylene chloride	ND	2.00								
n-Butylbenzene	ND	1.00								
2-Hexanone	ND	2.00								
n-Propylbenzene	ND	1.00								
sec-Butylbenzene	ND	1.00								
Styrene	ND	1.00								
4-Methyl-2-pentanone	ND	2.00								
tert-Butylbenzene	ND	1.00								
1,1,1,2-Tetrachloroethane	ND	1.00								
1,1,2,2-Tetrachloroethane	ND	1.00								
Tetrachloroethene (PCE)	ND	1.00								
trans-1,2-DCE	ND	1.00								
trans-1,3-Dichloropropene	ND	1.00								
1,2,3-Trichlorobenzene	ND	1.00								
1,2,4-Trichlorobenzene	ND	1.00								
1,1,1-Trichloroethane	ND	1.00								
1,1,2-Trichloroethane	ND	1.00								
Trichloroethene (TCE)	ND	1.00								
Trichlorofluoromethane	ND	1.00								
1,2,3-Trichloropropane	ND	1.00								
Vinyl chloride	ND	1.00								
Surr: 1,2-Dichloroethane-d4	52.9		50.00		106	70	130			
Surr: 4-Bromofluorobenzene	48.7		50.00		97.4	70	130			
Surr: Dibromofluoromethane	46.6		50.00		93.2	70	130			
Surr: Toluene-d8	50.9		50.00		102	70	130			

Sample ID	lcs-2930		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 2930			RunNo: 4215				
Prep Date:	7/20/2012		Analysis Date: 7/20/2012			SeqNo: 120456 Units: µg/Kg-dry				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.0	1.00	10.00	0	110	60	140			
Toluene	10.6	1.00	10.00	0	106	60	140			
Chlorobenzene	10.9	1.00	10.00	0	109	60	140			
1,1-Dichloroethene	11.9	1.00	10.00	0	119	60	140			
Trichloroethene (TCE)	11.1	1.00	10.00	0	111	60	140			
Surr: 1,2-Dichloroethane-d4	51.8		50.00		104	70	130			
Surr: 4-Bromofluorobenzene	47.6		50.00		95.1	70	130			
Surr: Dibromofluoromethane	47.2		50.00		94.3	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2930		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 2930		RunNo: 4215					
Prep Date:	7/20/2012		Analysis Date: 7/20/2012		SeqNo: 120456		Units: µg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	49.8		50.00		99.7	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120975		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120975		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/20/2012		SeqNo:	120980	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	1207711-001a ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/20/2012		SeqNo:	120981	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID	1207711-001a msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/20/2012		SeqNo:	120982	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122005	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122005		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122005	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122008	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122636		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID: R4402		RunNo: 4402						
Prep Date:		Analysis Date: 7/24/2012		SeqNo: 122636		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID	100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID: R4402		RunNo: 4402						
Prep Date:		Analysis Date: 7/24/2012		SeqNo: 122639		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	84.1	126			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.6	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	84.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4402		RunNo:	4402			
Prep Date:			Analysis Date:	7/24/2012		SeqNo:	122639	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	1207922-010a ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	EB071812		Batch ID:	R4402		RunNo:	4402			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	122640	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128			
Toluene	21	1.0	20.00	0.7840	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	1207922-010a msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	EB071812		Batch ID:	R4402		RunNo:	4402			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	122641	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128	0.357	16.7	
Toluene	20	1.0	20.00	0.7840	97.4	70	130	4.94	18.7	
Chlorobenzene	19	1.0	20.00	0	96.4	70	130	5.90	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	90.7	70	130	5.30	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	86.6	70	130	0.772	17.5	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125370	Units:	%REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125371		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs2		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125372		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	1207949-001a ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125377		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID	1207a22-002ams		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/26/2012		SeqNo:	125378		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	460		500.0		92.4	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.8	70	130			
Surr: Dibromofluoromethane	510		500.0		102	70	130			
Surr: Toluene-d8	500		500.0		101	70	130			

Sample ID	1207a22-002amsd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/26/2012		SeqNo:	125380		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	470		500.0		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207a22-002amsd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/26/2012		SeqNo:	125380		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	520		500.0		104	70	130	0	0	
Surr: Toluene-d8	520		500.0		105	70	130	0	0	

Sample ID	1207949-001a msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125381		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID	b15		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/26/2012		SeqNo:	125426		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	5ml rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBW		Batch ID:	R4498		RunNo:	4498			
Prep Date:			Analysis Date:	7/27/2012		SeqNo:	126086		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID	100ng lcsb		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4498		RunNo:	4498			
Prep Date:			Analysis Date:	7/27/2012		SeqNo:	126090		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207a57-001ams	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4498			RunNo: 4498					
Prep Date:		Analysis Date: 7/27/2012			SeqNo: 126091		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	470		500.0		93.5	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.0	70	130			
Surr: Dibromofluoromethane	530		500.0		106	70	130			
Surr: Toluene-d8	520		500.0		104	70	130			

Sample ID	1207a57-001amsd	SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES				
Client ID:	BatchQC	Batch ID:	R4498		RunNo:	4498				
Prep Date:		Analysis Date:	7/27/2012		SeqNo:	126092		Units:	%REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	460		500.0		91.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	500		500.0		99.5	70	130	0	0	
Surr: Dibromofluoromethane	530		500.0		106	70	130	0	0	
Surr: Toluene-d8	520		500.0		104	70	130	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2996	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	2996	RunNo:	4454					
Prep Date:	7/24/2012	Analysis Date:	7/26/2012	SeqNo:	124345	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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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R RPD outside accepted recovery limits

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2996		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124345		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		79.2	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.3	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		87.9	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.2	20.8	123			
Surr: Phenol-d5	2.7		3.330		82.4	19.8	115			

Sample ID	lcs-2996		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124346		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2996		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124346		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	69.0	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	67.9	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	61.9	41	97.4			
2,4-Dinitrotoluene	1.4	0.50	1.670	0	80.8	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.1	39.1	86.9			
4-Nitrophenol	2.8	0.25	3.330	0	82.9	44.2	107			
Pentachlorophenol	2.3	0.40	3.330	0	68.1	36.2	80			
Phenol	2.5	0.20	3.330	0	73.9	42.7	92.7			
Pyrene	1.0	0.20	1.670	0	62.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.4	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		82.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		75.6	19	133			
Surr: 2-Fluorophenol	2.2		3.330		66.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.1	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.8	20.8	123			
Surr: Phenol-d5	2.5		3.330		74.7	19.8	115			

Sample ID	1207666-001Ams		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124359		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.3	1.0	8.322	0	75.9	38.6	100			
4-Chloro-3-methylphenol	14	2.5	16.59	0	86.5	35.8	108			
2-Chlorophenol	13	1.0	16.59	0	79.4	48.2	96.1			
1,4-Dichlorobenzene	6.0	1.0	8.322	0	72.5	42.5	97.6			
2,4-Dinitrotoluene	7.0	2.5	8.322	0	84.0	51.2	108			
N-Nitrosodi-n-propylamine	7.0	1.0	8.322	0	84.7	31.6	114			
4-Nitrophenol	16	1.2	16.59	0.3837	94.3	22.7	144			
Pentachlorophenol	9.8	2.0	16.59	0	59.3	24	109			
Phenol	17	1.0	16.59	6.194	66.9	33.1	108			
Pyrene	5.2	1.0	8.322	0	62.5	42.7	98.9			
1,2,4-Trichlorobenzene	6.1	1.0	8.322	0	73.0	27.1	118			
Surr: 2,4,6-Tribromophenol	15		16.59		92.7	20.1	121			
Surr: 2-Fluorobiphenyl	6.6		8.322		79.8	19	133			
Surr: 2-Fluorophenol	13		16.59		75.7	20.2	108			
Surr: 4-Terphenyl-d14	6.3		8.322		75.6	18.9	115			
Surr: Nitrobenzene-d5	6.7		8.322		80.5	20.8	123			
Surr: Phenol-d5	15		16.59		88.8	19.8	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207666-001Amsd	SampType: MSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 2996			RunNo: 4454					
Prep Date:	7/24/2012	Analysis Date: 7/26/2012			SeqNo: 124360		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	6.2	1.0	8.406	0	73.4	38.6	100	2.26	20	
4-Chloro-3-methylphenol	14	2.5	16.76	0	81.8	35.8	108	4.66	20	
2-Chlorophenol	13	1.0	16.76	0	79.6	48.2	96.1	1.28	20	
1,4-Dichlorobenzene	6.2	1.0	8.406	0	73.6	42.5	97.6	2.48	20	
2,4-Dinitrotoluene	6.8	2.5	8.406	0	81.0	51.2	108	2.63	20	
N-Nitrosodi-n-propylamine	7.4	1.0	8.406	0	88.4	31.6	114	5.25	20	
4-Nitrophenol	15	1.3	16.76	0.3837	86.4	22.7	144	7.52	20	
Pentachlorophenol	10	2.0	16.76	0	61.0	24	109	3.78	20	
Phenol	20	1.0	16.76	6.194	81.0	33.1	108	13.4	20	
Pyrene	4.8	1.0	8.406	0	57.5	42.7	98.9	7.41	20	
1,2,4-Trichlorobenzene	6.3	1.0	8.406	0	74.7	27.1	118	3.30	20	
Surr: 2,4,6-Tribromophenol	15		16.76		88.4	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	6.3		8.406		75.1	19	133	0	0	
Surr: 2-Fluorophenol	14		16.76		81.8	20.2	108	0	0	
Surr: 4-Terphenyl-d14	6.1		8.406		72.3	18.9	115	0	0	
Surr: Nitrobenzene-d5	6.7		8.406		79.6	20.8	123	0	0	
Surr: Phenol-d5	15		16.76		88.2	19.8	115	0	0	

Sample ID	mb-3024		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 3024		RunNo: 4492					
Prep Date:	7/25/2012		Analysis Date: 7/27/2012		SeqNo: 125905		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	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3024	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	3024	RunNo:	4492					
Prep Date:	7/25/2012	Analysis Date:	7/27/2012	SeqNo:	125905	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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								

Qualifiers:

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R RPD outside accepted recovery limits

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H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3024		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 3024		RunNo: 4492					
Prep Date:	7/25/2012		Analysis Date: 7/27/2012		SeqNo: 125905		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.6	19	133			
Surr: 2-Fluorophenol	2.0		3.330		60.2	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.0	18.9	115			
Surr: Nitrobenzene-d5	1.1		1.670		67.4	20.8	123			
Surr: Phenol-d5	2.4		3.330		70.9	19.8	115			

Sample ID	lcs-3024		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 3024		RunNo: 4492					
Prep Date:	7/25/2012		Analysis Date: 7/27/2012		SeqNo: 125907		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	70.7	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	61.7	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	63.5	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	78.9	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.4	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	85.9	44.2	107			
Pentachlorophenol	2.5	0.40	3.330	0	74.5	36.2	80			
Phenol	2.4	0.20	3.330	0	71.3	42.7	92.7			
Pyrene	1.1	0.20	1.670	0	67.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.0	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		74.2	19	133			
Surr: 2-Fluorophenol	1.9		3.330		57.9	20.2	108			
Surr: 4-Terphenyl-d14	1.4		1.670		84.5	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		70.6	20.8	123			
Surr: Phenol-d5	2.3		3.330		68.9	19.8	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207922-008Cms	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SMWU 14-7 (6-8')	Batch ID:	3024	RunNo:	4492					
Prep Date:	7/25/2012	Analysis Date:	7/27/2012	SeqNo:	125927	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.40	1.674	0	101	38.6	100			S
4-Chloro-3-methylphenol	2.8	1.0	3.339	0	84.9	35.8	108			
2-Chlorophenol	2.7	0.40	3.339	0	81.4	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.40	1.674	0	73.3	42.5	97.6			
2,4-Dinitrotoluene	1.2	1.0	1.674	0	68.9	51.2	108			
N-Nitrosodi-n-propylamine	ND	0.40	1.674	0	0	31.6	114			S
4-Nitrophenol	2.1	0.50	3.339	0	63.0	22.7	144			
Pentachlorophenol	2.2	0.80	3.339	0	64.8	24	109			
Phenol	3.0	0.40	3.339	0	88.9	33.1	108			
Pyrene	1.6	0.40	1.674	0.2483	83.5	42.7	98.9			
1,2,4-Trichlorobenzene	1.2	0.40	1.674	0	69.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.2		3.339		67.3	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.674		76.2	19	133			
Surr: 2-Fluorophenol	2.4		3.339		71.5	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.674		90.0	18.9	115			
Surr: Nitrobenzene-d5	0		1.674		0	20.8	123			S
Surr: Phenol-d5	2.8		3.339		83.5	19.8	115			

Sample ID	1207922-008Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SMWU 14-7 (6-8')	Batch ID:	3024	RunNo:	4492					
Prep Date:	7/25/2012	Analysis Date:	7/27/2012	SeqNo:	125928	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.40	1.671	0	86.7	38.6	100	15.9	20	
4-Chloro-3-methylphenol	2.8	1.0	3.332	0	84.1	35.8	108	1.20	20	
2-Chlorophenol	2.6	0.40	3.332	0	76.5	48.2	96.1	6.31	20	
1,4-Dichlorobenzene	1.2	0.40	1.671	0	70.6	42.5	97.6	3.92	20	
2,4-Dinitrotoluene	1.3	1.0	1.671	0	75.0	51.2	108	8.24	20	
N-Nitrosodi-n-propylamine	ND	0.40	1.671	0	0	31.6	114	0	20	S
4-Nitrophenol	2.0	0.50	3.332	0	61.2	22.7	144	3.20	20	
Pentachlorophenol	2.4	0.80	3.332	0	72.1	24	109	10.3	20	
Phenol	2.7	0.40	3.332	0	80.9	33.1	108	9.61	20	
Pyrene	1.5	0.40	1.671	0.2483	75.5	42.7	98.9	8.58	20	
1,2,4-Trichlorobenzene	1.2	0.40	1.671	0	74.3	27.1	118	6.12	20	
Surr: 2,4,6-Tribromophenol	2.3		3.332		69.8	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.671		70.5	19	133	0	0	
Surr: 2-Fluorophenol	2.4		3.332		71.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.4		1.671		84.2	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.2		1.671		74.7	20.8	123	0	0	
Surr: Phenol-d5	2.7		3.332		80.4	19.8	115	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3046		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	3046		RunNo:	4555			
Prep Date:	7/26/2012		Analysis Date:	7/31/2012		SeqNo:	127860		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	1.6		3.330		49.3	20.1	121			
Surr: 2-Fluorobiphenyl	0.71		1.670		42.7	19	133			
Surr: 2-Fluorophenol	1.2		3.330		34.6	20.2	108			
Surr: 4-Terphenyl-d14	0.73		1.670		43.6	18.9	115			
Surr: Nitrobenzene-d5	0.67		1.670		39.9	20.8	123			
Surr: Phenol-d5	1.3		3.330		38.0	19.8	115			

Sample ID	lcs-3046		SampType:	LCS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	LCSS		Batch ID:	3046		RunNo:	4555			
Prep Date:	7/26/2012		Analysis Date:	7/31/2012		SeqNo:	127861		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.0		3.330		91.5	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.4	19	133			
Surr: 2-Fluorophenol	1.9		3.330		56.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		69.2	20.8	123			
Surr: Phenol-d5	2.4		3.330		71.7	19.8	115			

Sample ID	1207940-019Cms		SampType:	MS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	BatchQC		Batch ID:	3046		RunNo:	4555			
Prep Date:	7/26/2012		Analysis Date:	7/31/2012		SeqNo:	127874		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.310		95.8	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.660		92.9	19	133			
Surr: 2-Fluorophenol	2.5		3.310		76.5	20.2	108			
Surr: 4-Terphenyl-d14	1.7		1.660		102	18.9	115			
Surr: Nitrobenzene-d5	1.5		1.660		91.6	20.8	123			
Surr: Phenol-d5	2.9		3.310		87.9	19.8	115			

Sample ID	1207940-019Cmsd		SampType:	MSD		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	BatchQC		Batch ID:	3046		RunNo:	4555			
Prep Date:	7/26/2012		Analysis Date:	7/31/2012		SeqNo:	127875		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.5		3.323		106	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.667		96.8	19	133	0	0	
Surr: 2-Fluorophenol	2.5		3.323		75.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.8		1.667		108	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.5		1.667		90.8	20.8	123	0	0	
Surr: Phenol-d5	3.1		3.323		91.9	19.8	115	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	2989	RunNo:	4400					
Prep Date:	7/24/2012	Analysis Date:	7/24/2012	SeqNo:	122513	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

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ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	2989	RunNo:	4400					
Prep Date:	7/24/2012	Analysis Date:	7/24/2012	SeqNo:	122513	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2989	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 2989			RunNo: 4400					
Prep Date:	7/24/2012	Analysis Date: 7/24/2012			SeqNo: 122514		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID	Icsd-2989		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122515		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3180		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131070		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-3180		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131071		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			

Sample ID	1207917-009CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131078		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1658	0	98.9	75	125			

Sample ID	1207917-009CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3180		RunNo: 4662					
Prep Date:	8/3/2012		Analysis Date: 8/3/2012		SeqNo: 131081		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.19	0.033	0.1651	0	115	75	125	14.8	20	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3107		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	3107		RunNo:	4677			
Prep Date:	7/31/2012		Analysis Date:	8/6/2012		SeqNo:	131415		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-3107		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	3107		RunNo:	4677			
Prep Date:	7/31/2012		Analysis Date:	8/6/2012		SeqNo:	131416		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	25.00	0	96.5	80	120			
Barium	23	0.10	25.00	0	91.0	80	120			
Beryllium	25	0.15	25.00	0	98.2	80	120			
Cadmium	23	0.10	25.00	0	91.9	80	120			
Chromium	23	0.30	25.00	0	90.5	80	120			
Lead	23	0.25	25.00	0	91.2	80	120			
Manganese	22	0.10	25.00	0	89.5	80	120			
Nickel	22	0.50	25.00	0	88.1	80	120			
Selenium	23	2.5	25.00	0	93.1	80	120			
Silver	4.6	0.25	5.000	0	92.6	80	120			
Vanadium	24	2.5	25.00	0	94.5	80	120			
Zinc	23	2.5	25.00	0	93.0	80	120			

Sample ID	MB-3107		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	3107		RunNo:	4698			
Prep Date:	7/31/2012		Analysis Date:	8/6/2012		SeqNo:	132142		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3107		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3107		RunNo: 4698					
Prep Date:	7/31/2012		Analysis Date: 8/6/2012		SeqNo: 132143		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.7880	103	80	120			

Sample ID	MB-3107		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 3107		RunNo: 4734					
Prep Date:	7/31/2012		Analysis Date: 8/8/2012		SeqNo: 133431		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Cobalt	ND	0.30								

Sample ID	LCS-3107		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3107		RunNo: 4734					
Prep Date:	7/31/2012		Analysis Date: 8/8/2012		SeqNo: 133432		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	26	2.5	25.00	0	103	80	120			
Cobalt	24	0.30	25.00	0	94.8	80	120			

Sample ID	1207917-006CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3107			RunNo: 4816					
Prep Date:	7/31/2012	Analysis Date: 8/10/2012			SeqNo: 135937		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	13	12	24.90	3.628	37.5	75	125			S
Arsenic	24	12	24.90	0	95.2	75	125			
Beryllium	25	0.75	24.90	0.7577	99.3	75	125			
Cadmium	24	0.50	24.90	0	94.7	75	125			
Chromium	37	1.5	24.90	12.12	99.0	75	125			
Cobalt	27	1.5	24.90	3.833	91.0	75	125			
Lead	23	1.2	24.90	4.390	76.5	75	125			
Nickel	30	2.5	24.90	7.255	90.8	75	125			
Selenium	19	12	24.90	0	77.0	75	125			
Silver	4.5	1.2	4.981	0	89.7	75	125			
Vanadium	50	12	24.90	20.97	117	75	125			
Zinc	49	12	24.90	35.46	52.9	75	125			S

Sample ID	1207917-006CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC		Batch ID: 3107		RunNo: 4816					
Prep Date:	7/31/2012		Analysis Date: 8/10/2012		SeqNo: 135940		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.81	3.628	35.3	75	125	200	20	S

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207922

22-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207917-006CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	3107	RunNo:	4816					
Prep Date:	7/31/2012	Analysis Date:	8/10/2012	SeqNo:	135940	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	22	12	24.81	0	88.4	75	125	7.79	20	
Beryllium	25	0.75	24.81	0.7577	96.5	75	125	3.15	20	
Cadmium	23	0.50	24.81	0	92.9	75	125	2.30	20	
Chromium	33	1.5	24.81	12.12	84.2	75	125	10.8	20	
Cobalt	26	1.5	24.81	3.833	89.7	75	125	1.59	20	
Lead	23	1.2	24.81	4.390	76.6	75	125	0.134	20	
Nickel	28	2.5	24.81	7.255	82.8	75	125	7.18	20	
Selenium	18	12	24.81	0	70.7	75	125	8.91	20	S
Silver	4.3	1.2	4.962	0	86.6	75	125	3.84	20	
Vanadium	46	12	24.81	20.97	98.9	75	125	9.82	20	
Zinc	51	12	24.81	35.46	63.8	75	125	5.31	20	S

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Harkins 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: 1207922

Received by/date:

[Signature] 07/20/12

Logged By:

Ashley Gallegos

7/20/2012 7:55:00 AM

Completed By:

Ashley Gallegos

7/20/2012 12:08:43 PM

Reviewed By:

[Signature] 07/20/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: *2* (<2 or >12 unless noted)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by: *[Signature]*

Special Handling (if applicable)

17. 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:

18. Additional remarks:

19. 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				Turn-Around Time:
Client: <u>WESTERN REFINING SW, INC.</u> Mailing Address: <u>GALLUP REFINERY</u> <u>ROUTE 3 BOX 7</u> <u>GALLUP, NM 87301</u> Phone #: <u>505-722-0217</u> email or Fax#: <u>SCOTT CROUCH-RPS</u>				☒ Standard ☐ Rush
Project Name: <u>SWML No. 14</u>				
Project #:				
Project Manager: <u>SCOTT CROUCH-RPS</u>				
Sampler: <u>TRACY PAYNE</u> On Ice: ☒ Yes ☐ No Sample Temperature: <u>10</u>				
Container Type and # Preservative Type HEAL No.				
Date	Time	Matrix	Sample Request ID	
7/18/12	1620	↓	SCOTT SWML 14-9 (0-05)	ZENCORES -
↓	↓	↓	↓	ZVIALS MECH
↓	↓	↓	↓	ZTARS -
1620	↓	↓	SWML 14-9 (0-05) DUP	ZENCORES -
↓	↓	↓	↓	ZVIALS MECH
↓	↓	↓	↓	ZTARS -
1630	↓	↓	SWML 14-9 (15-2)	ZENCORES -
↓	↓	↓	↓	ZVIALS MECH
↓	↓	↓	↓	ZTARS -
1640	↓	↓	SWML 14-9 (4-6)	ZENCORES -
↓	↓	↓	↓	ZVIALS MECH
↓	↓	↓	↓	ZTARS -
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation) Accreditation ☐ NELAP ☐ Other _____ A EDD (Type) <u>EXCEL</u>				
Received by: <u>[Signature]</u> Date: <u>07/20/12</u> Time: <u>12:00</u> Relinquished by: <u>[Signature]</u> Date: <u>7/19/12</u> Time: <u>0830</u>				

email or Fax#: <u>SCOTT CROUCH - RPS</u>		Project Manager:	
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)		Sampler: <u>SCOTT CROUCH - RPS</u>	
Accreditation ☐ NELAP ☐ Other _____		Sample: <u>TRACY PAYNE</u>	
☒ EDD (Type) <u>EXCEL</u>		On Ice: ☒ Yes ☐ No	
Date		Sample Temperature: <u>10</u>	
Time		Preservative Type	
Matrix		Container Type and #	
Sample Request ID		HEAL No. <u>1207922</u>	

email or Fax#: <u>SCOTT CROUCH - RPS</u>		Project Manager:	
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)		Sampler: <u>SCOTT CROUCH - RPS</u>	
Accreditation ☐ NELAP ☐ Other _____		Sampler: <u>TRACY PAYNE</u>	
☒ EDD (Type) <u>EXCEL</u>		On Ice: ☒ Yes ☐ No	
Date	Time	Matrix	Sample Request ID
7/18/12	1620	Soil	SWMU 14-9 (0-0.5') Z ENCORES --
			Z VIALS ME OH
			Z TARS --
	1620		SWMU 14-9 (0-0.5') Z ENCORES --
			Z VIALS ME OH
			Z TARS --
	1630		SWMU 14-9 (1.5-2') Z ENCORES --
			Z VIALS ME OH
			Z TARS --
	1640		SWMU 14-9 (4-6') Z ENCORES --
			Z VIALS ME OH
			Z TARS --

Date: 11/12/08	Time: 0830	Relinquished by: [Signature]	Received by: [Signature]	Date: 01/20/12	Time: 0
Date:	Time:	Relinquished by:	Received by:	Date:	Time:

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

Chain-of-Custody Record					
Turn-Around Time: ☒ Standard ☐ Rush Project Name:					
Client: WESTERN REFINING SW, INC. GALLUP REFINERY Mailing Address: ROUTE 3 BOX 7 GALLUP NM 87301 Phone #: 505-722-0217 email or Fax#: SCOTT CROUCH-RP3					
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation) Accreditation ☐ NELAP ☐ Other _____ ☒ EDD (Type) EXCEL					
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type
7-18-12/920	SOIL	SWMU 14-7	(23.5-24)	2 ENCORES	-
) ↓	) ↓	) ↓	↓	2 VIALS	MEDH
↓	↓	↓		2 JARS	-
7-18-12/945	WATER	EBO71812		6 VOA	HCL & NEAT -O/D
) ↓	) ↓	) ↓		1 CL AMBER	-
↓	↓	↓		1 PLASTIC HNO ₃	
				1 PLASTIC NaOH	
Relinquished by: [Signature]				Received by: [Signature]	
Date: 7/19/12	Time: 0830	Date: 7/19/12	Time: 0830	Date: 07/20/12	Time: 0750

4901 Hawkins NE - Albuquerque, NM 87109

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

[illegible]

Remarks:

Received by:	Date	Time

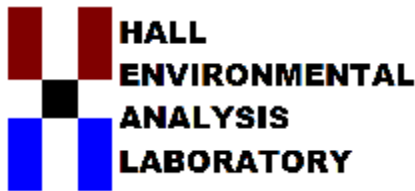
Date:	Time:	Relinquished ~~by~~ :

~~Received by:~~

Date:	Time:	Relinquished by:

**Metals List for SWMU No. 14 Old API Separator
Gallup Refinery
Western Refining Southwest, Inc.**

Analyte	Analytical Method
Antimony	SW-846 method 6010/6020
Arsenic	SW-846 method 6010/6020
Barium	SW-846 method 6010/6020
Beryllium	SW-846 method 6010/6020
Cadmium	SW-846 method 6010/6020
Chromium	SW-846 method 6010/6020
Cobalt	SW-846 method 6010/6020
Cyanide	SW-846 method 335.4/335.2 mod
Lead	SW-846 method 6010/6020
Mercury	SW-846 method 7470/7471
Nickel	SW-846 method 6010/6020
Selenium	SW-846 method 6010/6020
Silver	SW-846 method 6010/6020
Vanadium	SW-846 method 6010/6020
Zinc	SW-846 method 6010/6020
Iron	SW-846 method 6010/6020
Manganese	SW-846 method 6010/6020



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

August 21, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1207940

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 34 sample(s) on 7/20/2012 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. 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. 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.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:00:00 AM

Lab ID: 1207940-001

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	350	10		mg/Kg	1	7/23/2012 10:46:54 AM
Motor Oil Range Organics (MRO)	190	50		mg/Kg	1	7/23/2012 10:46:54 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 10:46:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/27/2012 2:33:57 AM
Surr: BFB	103	84-116		%REC	2	7/27/2012 2:33:57 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.32	0.033		mg/Kg	1	8/2/2012 9:11:33 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 2:33:40 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:32:50 PM
Barium	430	5.0		mg/Kg	50	8/5/2012 12:52:36 PM
Beryllium	0.89	0.75		mg/Kg	5	8/4/2012 3:32:50 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:33:40 PM
Chromium	23	1.5		mg/Kg	5	8/1/2012 2:33:40 PM
Cobalt	5.4	1.5		mg/Kg	5	8/4/2012 3:32:50 PM
Iron	15000	500		mg/Kg	500	8/5/2012 12:54:47 PM
Lead	7.7	1.2		mg/Kg	5	8/4/2012 3:32:50 PM
Manganese	510	5.0		mg/Kg	50	8/5/2012 12:52:36 PM
Nickel	9.3	2.5		mg/Kg	5	8/4/2012 3:32:50 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:32:50 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:33:40 PM
Vanadium	25	12		mg/Kg	5	8/1/2012 2:33:40 PM
Zinc	49	12		mg/Kg	5	8/4/2012 3:32:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:00:00 AM

Lab ID: 1207940-001

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 4:18:42 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:00:00 AM

Lab ID: 1207940-001

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 4:18:42 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:18:42 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 4:18:42 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 4:18:42 PM
Surr: 2,4,6-Tribromophenol	104	20.1-121		%REC	1	7/27/2012 4:18:42 PM
Surr: 2-Fluorobiphenyl	93.2	19-133		%REC	1	7/27/2012 4:18:42 PM
Surr: 2-Fluorophenol	92.3	20.2-108		%REC	1	7/27/2012 4:18:42 PM
Surr: 4-Terphenyl-d14	97.6	18.9-115		%REC	1	7/27/2012 4:18:42 PM
Surr: Nitrobenzene-d5	91.6	20.8-123		%REC	1	7/27/2012 4:18:42 PM
Surr: Phenol-d5	83.0	19.8-115		%REC	1	7/27/2012 4:18:42 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Toluene	2.92	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Ethylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Xylenes, Total	ND	2.94		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Methyl tert-butyl ether (MTBE)	ND	1.96		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,4-Trimethylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,3,5-Trimethylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dichloroethane (EDC)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dibromoethane (EDB)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Naphthalene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1-Methylnaphthalene	ND	3.93		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Methylnaphthalene	ND	3.93		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Acetone	ND	29.4		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Bromobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Bromodichloromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Bromoform	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Butanone	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Carbon tetrachloride	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Chlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Chloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Chloroform	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:00:00 AM

Lab ID: 1207940-001

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Chlorotoluene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Carbon disulfide	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
4-Chlorotoluene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
cis-1,2-DCE	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
cis-1,3-Dichloropropene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dibromo-3-chloropropane	ND	1.96		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Dibromochloromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Dibromomethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,3-Dichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,4-Dichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Dichlorodifluoromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1-Dichloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1-Dichloroethene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2-Dichloropropane	ND	1.96		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,3-Dichloropropane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2,2-Dichloropropane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1-Dichloropropene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Hexachlorobutadiene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Isopropylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
4-Isopropyltoluene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Methylene chloride	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
n-Butylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
2-Hexanone	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
n-Propylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
sec-Butylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Styrene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
4-Methyl-2-pentanone	ND	4.91		µg/Kg-dry	1	7/26/2012 7:57:54 PM
tert-Butylbenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,1,2-Tetrachloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,2,2-Tetrachloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Tetrachloroethene (PCE)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
trans-1,2-DCE	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
trans-1,3-Dichloropropene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,3-Trichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,4-Trichlorobenzene	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,1-Trichloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,1,2-Trichloroethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Trichloroethene (TCE)	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Trichlorofluoromethane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
1,2,3-Trichloropropane	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:00:00 AM

Lab ID: 1207940-001

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.981		µg/Kg-dry	1	7/26/2012 7:57:54 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	7/26/2012 7:57:54 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	7/26/2012 7:57:54 PM
Surr: Dibromofluoromethane	88.0	70-130		%REC	1	7/26/2012 7:57:54 PM
Surr: Toluene-d8	97.9	70-130		%REC	1	7/26/2012 7:57:54 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:05:00 AM

Lab ID: 1207940-002

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	240	10		mg/Kg	1	7/23/2012 11:12:14 AM
Motor Oil Range Organics (MRO)	150	51		mg/Kg	1	7/23/2012 11:12:14 AM
Surr: DNOP	111	77.6-140		%REC	1	7/23/2012 11:12:14 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	7/27/2012 3:02:41 AM
Surr: BFB	101	84-116		%REC	2	7/27/2012 3:02:41 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.21	0.16		mg/Kg	5	8/2/2012 9:29:23 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 2:38:44 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:35:11 PM
Barium	430	5.0		mg/Kg	50	8/5/2012 12:57:26 PM
Beryllium	0.83	0.75		mg/Kg	5	8/4/2012 3:35:11 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:38:44 PM
Chromium	23	1.5		mg/Kg	5	8/1/2012 2:38:44 PM
Cobalt	5.1	1.5		mg/Kg	5	8/4/2012 3:35:11 PM
Iron	14000	500		mg/Kg	500	8/5/2012 12:59:38 PM
Lead	6.8	1.2		mg/Kg	5	8/4/2012 3:35:11 PM
Manganese	530	5.0		mg/Kg	50	8/5/2012 12:57:26 PM
Nickel	8.8	2.5		mg/Kg	5	8/4/2012 3:35:11 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:35:11 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:38:44 PM
Vanadium	23	12		mg/Kg	5	8/1/2012 2:38:44 PM
Zinc	43	12		mg/Kg	5	8/4/2012 3:35:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Acenaphthylene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Aniline	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Anthracene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Azobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:05:00 AM

Lab ID: 1207940-002

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Carbazole	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Chrysene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Dibenzofuran	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 4:48:12 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
Fluoranthene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Fluorene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Hexachloroethane	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Naphthalene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:05:00 AM

Lab ID: 1207940-002

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 4:48:12 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 4:48:12 PM
Phenanthrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Phenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Pyrene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 4:48:12 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/27/2012 4:48:12 PM
Surr: 2,4,6-Tribromophenol	105	20.1-121		%REC	1	7/27/2012 4:48:12 PM
Surr: 2-Fluorobiphenyl	96.1	19-133		%REC	1	7/27/2012 4:48:12 PM
Surr: 2-Fluorophenol	89.6	20.2-108		%REC	1	7/27/2012 4:48:12 PM
Surr: 4-Terphenyl-d14	100	18.9-115		%REC	1	7/27/2012 4:48:12 PM
Surr: Nitrobenzene-d5	93.1	20.8-123		%REC	1	7/27/2012 4:48:12 PM
Surr: Phenol-d5	85.9	19.8-115		%REC	1	7/27/2012 4:48:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Toluene	0.892	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Ethylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Xylenes, Total	ND	2.64		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Methyl tert-butyl ether (MTBE)	ND	1.76		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,4-Trimethylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,3,5-Trimethylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dichloroethane (EDC)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dibromoethane (EDB)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Naphthalene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Acetone	ND	26.4		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Bromobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Bromodichloromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Bromoform	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Butanone	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Carbon tetrachloride	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Chlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Chloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Chloroform	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:05:00 AM

Lab ID: 1207940-002

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Chlorotoluene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Carbon disulfide	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
4-Chlorotoluene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
cis-1,2-DCE	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
cis-1,3-Dichloropropene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dibromo-3-chloropropane	ND	1.76		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Dibromochloromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Dibromomethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,3-Dichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,4-Dichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Dichlorodifluoromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1-Dichloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1-Dichloroethene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2-Dichloropropane	ND	1.76		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,3-Dichloropropane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2,2-Dichloropropane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1-Dichloropropene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Hexachlorobutadiene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Isopropylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
4-Isopropyltoluene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Methylene chloride	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
n-Butylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
2-Hexanone	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
n-Propylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
sec-Butylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Styrene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
4-Methyl-2-pentanone	ND	4.39		µg/Kg-dry	1	7/26/2012 8:25:36 PM
tert-Butylbenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,1,2-Tetrachloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,2,2-Tetrachloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Tetrachloroethene (PCE)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
trans-1,2-DCE	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
trans-1,3-Dichloropropene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,3-Trichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,4-Trichlorobenzene	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,1-Trichloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,1,2-Trichloroethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Trichloroethene (TCE)	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Trichlorofluoromethane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
1,2,3-Trichloropropane	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-10 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:05:00 AM

Lab ID: 1207940-002

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.879		µg/Kg-dry	1	7/26/2012 8:25:36 PM
Surr: 1,2-Dichloroethane-d4	188	70-130	S	%REC	1	7/26/2012 8:25:36 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/26/2012 8:25:36 PM
Surr: Dibromofluoromethane	92.1	70-130		%REC	1	7/26/2012 8:25:36 PM
Surr: Toluene-d8	94.8	70-130		%REC	1	7/26/2012 8:25:36 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:27:00 AM

Lab ID: 1207940-003

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	550	200		mg/Kg	20	7/23/2012 9:29:46 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/23/2012 9:29:46 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 9:29:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/27/2012 3:31:25 AM
Surr: BFB	99.9	84-116		%REC	5	7/27/2012 3:31:25 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.041	0.033		mg/Kg	1	8/2/2012 9:20:31 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 2:43:53 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:37:35 PM
Barium	610	5.0		mg/Kg	50	8/5/2012 1:02:12 PM
Beryllium	0.77	0.75		mg/Kg	5	8/4/2012 3:37:35 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:43:53 PM
Chromium	16	1.5		mg/Kg	5	8/1/2012 2:43:53 PM
Cobalt	5.0	1.5		mg/Kg	5	8/4/2012 3:37:35 PM
Iron	15000	500		mg/Kg	500	8/5/2012 1:14:21 PM
Lead	6.2	1.2		mg/Kg	5	8/4/2012 3:37:35 PM
Manganese	470	5.0		mg/Kg	50	8/5/2012 1:02:12 PM
Nickel	7.4	2.5		mg/Kg	5	8/4/2012 3:37:35 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:37:35 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:43:53 PM
Vanadium	25	12		mg/Kg	5	8/1/2012 2:43:53 PM
Zinc	33	12		mg/Kg	5	8/4/2012 3:37:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:27:00 AM

Lab ID: 1207940-003

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 5:17:55 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:27:00 AM

Lab ID: 1207940-003

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/27/2012 5:17:55 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:17:55 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 5:17:55 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:17:55 PM
Surr: 2,4,6-Tribromophenol	107	20.1-121		%REC	1	7/27/2012 5:17:55 PM
Surr: 2-Fluorobiphenyl	95.5	19-133		%REC	1	7/27/2012 5:17:55 PM
Surr: 2-Fluorophenol	92.9	20.2-108		%REC	1	7/27/2012 5:17:55 PM
Surr: 4-Terphenyl-d14	97.3	18.9-115		%REC	1	7/27/2012 5:17:55 PM
Surr: Nitrobenzene-d5	93.5	20.8-123		%REC	1	7/27/2012 5:17:55 PM
Surr: Phenol-d5	84.8	19.8-115		%REC	1	7/27/2012 5:17:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	12.2	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Toluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Ethylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Xylenes, Total	ND	2.54		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Methyl tert-butyl ether (MTBE)	ND	1.69		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,4-Trimethylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,3,5-Trimethylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dichloroethane (EDC)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dibromoethane (EDB)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Naphthalene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1-Methylnaphthalene	ND	3.39		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Methylnaphthalene	ND	3.39		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Acetone	ND	25.4		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Bromobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Bromodichloromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Bromoform	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Butanone	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Carbon tetrachloride	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Chlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Chloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Chloroform	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:27:00 AM

Lab ID: 1207940-003

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Chlorotoluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Carbon disulfide	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
4-Chlorotoluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
cis-1,2-DCE	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
cis-1,3-Dichloropropene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dibromo-3-chloropropane	ND	1.69		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Dibromochloromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Dibromomethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,3-Dichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,4-Dichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Dichlorodifluoromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1-Dichloroethane	0.918	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1-Dichloroethene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2-Dichloropropane	ND	1.69		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,3-Dichloropropane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2,2-Dichloropropane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1-Dichloropropene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Hexachlorobutadiene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Isopropylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
4-Isopropyltoluene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Methylene chloride	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
n-Butylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
2-Hexanone	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
n-Propylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
sec-Butylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Styrene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
4-Methyl-2-pentanone	ND	4.23		µg/Kg-dry	1	7/26/2012 8:53:14 PM
tert-Butylbenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,1,2-Tetrachloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,2,2-Tetrachloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Tetrachloroethene (PCE)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
trans-1,2-DCE	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
trans-1,3-Dichloropropene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,3-Trichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,4-Trichlorobenzene	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,1-Trichloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,1,2-Trichloroethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Trichloroethene (TCE)	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Trichlorofluoromethane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
1,2,3-Trichloropropane	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:27:00 AM

Lab ID: 1207940-003

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.847		µg/Kg-dry	1	7/26/2012 8:53:14 PM
Surr: 1,2-Dichloroethane-d4	168	70-130	S	%REC	1	7/26/2012 8:53:14 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	1	7/26/2012 8:53:14 PM
Surr: Dibromofluoromethane	87.2	70-130		%REC	1	7/26/2012 8:53:14 PM
Surr: Toluene-d8	96.6	70-130		%REC	1	7/26/2012 8:53:14 PM

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-004

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	4300	200		mg/Kg	20	7/23/2012 9:51:40 AM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/23/2012 9:51:40 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 9:51:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/27/2012 4:00:09 AM
Surr: BFB	111	84-116		%REC	50	7/27/2012 4:00:09 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:22:17 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 2:48:46 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:39:56 PM
Barium	690	50		mg/Kg	500	8/5/2012 1:16:54 PM
Beryllium	0.88	0.75		mg/Kg	5	8/4/2012 3:39:56 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:48:46 PM
Chromium	10	1.5		mg/Kg	5	8/1/2012 2:48:46 PM
Cobalt	4.7	1.5		mg/Kg	5	8/4/2012 3:39:56 PM
Iron	13000	500		mg/Kg	500	8/5/2012 1:16:54 PM
Lead	5.0	1.2		mg/Kg	5	8/4/2012 3:39:56 PM
Manganese	190	0.50		mg/Kg	5	8/4/2012 3:39:56 PM
Nickel	7.9	2.5		mg/Kg	5	8/4/2012 3:39:56 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:39:56 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:48:46 PM
Vanadium	18	12		mg/Kg	5	8/1/2012 2:48:46 PM
Zinc	15	12		mg/Kg	5	8/4/2012 3:39:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-004

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 5:47:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
1-Methylnaphthalene	3.6	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2-Methylnaphthalene	4.2	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Naphthalene	1.5	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
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Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-004

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 5:47:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 5:47:57 PM
Phenanthrene	1.1	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 5:47:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 5:47:57 PM
Surr: 2,4,6-Tribromophenol	87.4	20.1-121		%REC	1	7/27/2012 5:47:57 PM
Surr: 2-Fluorobiphenyl	70.0	19-133		%REC	1	7/27/2012 5:47:57 PM
Surr: 2-Fluorophenol	72.2	20.2-108		%REC	1	7/27/2012 5:47:57 PM
Surr: 4-Terphenyl-d14	75.0	18.9-115		%REC	1	7/27/2012 5:47:57 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/27/2012 5:47:57 PM
Surr: Phenol-d5	86.8	19.8-115		%REC	1	7/27/2012 5:47:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Toluene	1.4	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Ethylbenzene	3.8	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,4-Trimethylbenzene	6.7	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,3,5-Trimethylbenzene	2.2	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Naphthalene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	7/23/2012 11:36:10 PM
Acetone	ND	15		mg/Kg	20	7/23/2012 11:36:10 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Bromoform	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Bromomethane	ND	3.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Butanone	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Carbon disulfide	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Chloroethane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM

Qualifiers:

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- E Value above quantitation range
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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-004

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Chloromethane	ND	3.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
2-Hexanone	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/23/2012 11:36:10 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/23/2012 11:36:10 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
n-Propylbenzene	1.4	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Styrene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/23/2012 11:36:10 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-004

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/23/2012 11:36:10 PM
Xylenes, Total	9.3	2.0		mg/Kg	20	7/23/2012 11:36:10 PM
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	20	7/23/2012 11:36:10 PM
Surr: 4-Bromofluorobenzene	86.6	70-130		%REC	20	7/23/2012 11:36:10 PM
Surr: Dibromofluoromethane	108	70-130		%REC	20	7/23/2012 11:36:10 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/23/2012 11:36:10 PM

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 S Spike Recovery outside accepted recovery limits

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Analytical Report

Lab Order 1207940

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Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-005

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	3600	200		mg/Kg	20	7/23/2012 10:13:29 AM
Motor Oil Range Organics (MRO)	ND	980		mg/Kg	20	7/23/2012 10:13:29 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 10:13:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/27/2012 4:28:51 AM
Surr: BFB	115	84-116		%REC	50	7/27/2012 4:28:51 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:24:04 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:02:41 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:42:19 PM
Barium	410	10		mg/Kg	100	8/5/2012 1:21:10 PM
Beryllium	0.93	0.75		mg/Kg	5	8/4/2012 3:42:19 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:02:41 PM
Chromium	11	1.5		mg/Kg	5	8/1/2012 3:02:41 PM
Cobalt	5.0	1.5		mg/Kg	5	8/4/2012 3:42:19 PM
Iron	14000	500		mg/Kg	500	8/5/2012 1:23:20 PM
Lead	3.7	1.2		mg/Kg	5	8/4/2012 3:42:19 PM
Manganese	210	0.50		mg/Kg	5	8/4/2012 3:42:19 PM
Nickel	8.5	2.5		mg/Kg	5	8/4/2012 3:42:19 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:42:19 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:02:41 PM
Vanadium	21	12		mg/Kg	5	8/1/2012 3:02:41 PM
Zinc	17	12		mg/Kg	5	8/4/2012 3:42:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Aniline	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Anthracene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Azobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-005

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Carbazole	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Chrysene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/27/2012 6:18:03 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Fluorene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Isophorone	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
1-Methylnaphthalene	1.5	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2-Methylnaphthalene	1.6	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Naphthalene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM

Qualifiers:

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Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-005

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/27/2012 6:18:03 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/27/2012 6:18:03 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Phenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Pyrene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Pyridine	ND	2.5		mg/Kg	1	7/27/2012 6:18:03 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/27/2012 6:18:03 PM
Surr: 2,4,6-Tribromophenol	111	20.1-121		%REC	1	7/27/2012 6:18:03 PM
Surr: 2-Fluorobiphenyl	92.7	19-133		%REC	1	7/27/2012 6:18:03 PM
Surr: 2-Fluorophenol	103	20.2-108		%REC	1	7/27/2012 6:18:03 PM
Surr: 4-Terphenyl-d14	110	18.9-115		%REC	1	7/27/2012 6:18:03 PM
Surr: Nitrobenzene-d5	114	20.8-123		%REC	1	7/27/2012 6:18:03 PM
Surr: Phenol-d5	106	19.8-115		%REC	1	7/27/2012 6:18:03 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Toluene	1.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Ethylbenzene	4.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,4-Trimethylbenzene	8.4	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,3,5-Trimethylbenzene	2.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Naphthalene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1-Methylnaphthalene	ND	4.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Methylnaphthalene	ND	4.0		mg/Kg	20	7/24/2012 12:32:38 AM
Acetone	ND	15		mg/Kg	20	7/24/2012 12:32:38 AM
Bromobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Bromoform	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Bromomethane	ND	3.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Butanone	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Carbon disulfide	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Chlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Chloroethane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-005

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Chloromethane	ND	3.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Dibromomethane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
2-Hexanone	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Isopropylbenzene	1.2	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/24/2012 12:32:38 AM
Methylene chloride	ND	3.0		mg/Kg	20	7/24/2012 12:32:38 AM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
n-Propylbenzene	1.7	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Styrene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/24/2012 12:32:38 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-8 (1.5-2.0') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 11:40:00 AM

Lab ID: 1207940-005

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/24/2012 12:32:38 AM
Xylenes, Total	12	2.0		mg/Kg	20	7/24/2012 12:32:38 AM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	20	7/24/2012 12:32:38 AM
Surr: 4-Bromofluorobenzene	78.2	70-130		%REC	20	7/24/2012 12:32:38 AM
Surr: Dibromofluoromethane	104	70-130		%REC	20	7/24/2012 12:32:38 AM
Surr: Toluene-d8	104	70-130		%REC	20	7/24/2012 12:32:38 AM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:05:00 PM

Lab ID: 1207940-006

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	15000	190		mg/Kg	20	7/23/2012 10:57:23 AM
Motor Oil Range Organics (MRO)	ND	970		mg/Kg	20	7/23/2012 10:57:23 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 10:57:23 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	700	500		mg/Kg	100	7/27/2012 4:57:29 AM
Surr: BFB	111	84-116		%REC	100	7/27/2012 4:57:29 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.040	0.033		mg/Kg	1	8/2/2012 9:34:47 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:07:46 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:44:40 PM
Barium	150	0.50		mg/Kg	5	8/4/2012 3:44:40 PM
Beryllium	1.0	0.75		mg/Kg	5	8/4/2012 3:44:40 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:07:46 PM
Chromium	12	1.5		mg/Kg	5	8/1/2012 3:07:46 PM
Cobalt	5.9	1.5		mg/Kg	5	8/4/2012 3:44:40 PM
Iron	15000	500		mg/Kg	500	8/5/2012 1:25:53 PM
Lead	4.4	1.2		mg/Kg	5	8/4/2012 3:44:40 PM
Manganese	240	0.50		mg/Kg	5	8/4/2012 3:44:40 PM
Nickel	9.8	2.5		mg/Kg	5	8/4/2012 3:44:40 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:44:40 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:07:46 PM
Vanadium	23	12		mg/Kg	5	8/1/2012 3:07:46 PM
Zinc	18	12		mg/Kg	5	8/4/2012 3:44:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM

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 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit
 U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:05:00 PM

Lab ID: 1207940-006

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 6:48:08 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
1-Methylnaphthalene	21	4.0		mg/Kg	10	7/30/2012 5:05:23 PM
2-Methylnaphthalene	32	4.0		mg/Kg	10	7/30/2012 5:05:23 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
3+4-Methylphenol	1.1	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Naphthalene	6.6	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM

Qualifiers:

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- E Value above quantitation range
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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:05:00 PM

Lab ID: 1207940-006

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 6:48:08 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 6:48:08 PM
Phenanthrene	7.3	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Phenol	2.1	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Pyrene	1.1	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 6:48:08 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 6:48:08 PM
Surr: 2,4,6-Tribromophenol	0	20.1-121	S	%REC	1	7/27/2012 6:48:08 PM
Surr: 2-Fluorobiphenyl	46.3	19-133		%REC	1	7/27/2012 6:48:08 PM
Surr: 2-Fluorophenol	30.2	20.2-108		%REC	1	7/27/2012 6:48:08 PM
Surr: 4-Terphenyl-d14	62.5	18.9-115		%REC	1	7/27/2012 6:48:08 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/27/2012 6:48:08 PM
Surr: Phenol-d5	67.0	19.8-115		%REC	1	7/27/2012 6:48:08 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	5.9	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Toluene	45	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Ethylbenzene	17	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,4-Trimethylbenzene	38	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,3,5-Trimethylbenzene	11	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Naphthalene	16	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1-Methylnaphthalene	29	10		mg/Kg	50	7/22/2012 12:37:39 AM
2-Methylnaphthalene	50	10		mg/Kg	50	7/22/2012 12:37:39 AM
Acetone	ND	38		mg/Kg	50	7/22/2012 12:37:39 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Bromoform	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Bromomethane	ND	7.5		mg/Kg	50	7/22/2012 12:37:39 AM
2-Butanone	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Carbon disulfide	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Chloroethane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:05:00 PM

Lab ID: 1207940-006

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Chloromethane	ND	7.5		mg/Kg	50	7/22/2012 12:37:39 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
2-Hexanone	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Isopropylbenzene	3.0	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/22/2012 12:37:39 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/22/2012 12:37:39 AM
n-Butylbenzene	4.0	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
n-Propylbenzene	6.2	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Styrene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/22/2012 12:37:39 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:05:00 PM

Lab ID: 1207940-006

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	2.5		mg/Kg	50	7/22/2012 12:37:39 AM
Xylenes, Total	86	5.0		mg/Kg	50	7/22/2012 12:37:39 AM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	50	7/22/2012 12:37:39 AM
Surr: 4-Bromofluorobenzene	86.2	70-130		%REC	50	7/22/2012 12:37:39 AM
Surr: Dibromofluoromethane	93.3	70-130		%REC	50	7/22/2012 12:37:39 AM
Surr: Toluene-d8	97.4	70-130		%REC	50	7/22/2012 12:37:39 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:12:00 PM

Lab ID: 1207940-007

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1500	97		mg/Kg	10	7/23/2012 7:19:35 AM
Motor Oil Range Organics (MRO)	ND	490		mg/Kg	10	7/23/2012 7:19:35 AM
Surr: DNOP	0	77.6-140	S	%REC	10	7/23/2012 7:19:35 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	370	100		mg/Kg	20	7/30/2012 4:07:16 PM
Surr: BFB	115	84-116		%REC	20	7/30/2012 4:07:16 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.097	0.033		mg/Kg	1	8/2/2012 9:36:35 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:12:50 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:47:03 PM
Barium	120	0.50		mg/Kg	5	8/4/2012 3:47:03 PM
Beryllium	0.95	0.75		mg/Kg	5	8/4/2012 3:47:03 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:12:50 PM
Chromium	12	1.5		mg/Kg	5	8/1/2012 3:12:50 PM
Cobalt	5.3	1.5		mg/Kg	5	8/4/2012 3:47:03 PM
Iron	15000	500		mg/Kg	500	8/5/2012 1:38:51 PM
Lead	2.6	1.2		mg/Kg	5	8/4/2012 3:47:03 PM
Manganese	300	10		mg/Kg	100	8/5/2012 1:36:26 PM
Nickel	8.7	2.5		mg/Kg	5	8/4/2012 3:47:03 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:47:03 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:12:50 PM
Vanadium	22	12		mg/Kg	5	8/1/2012 3:12:50 PM
Zinc	18	12		mg/Kg	5	8/4/2012 3:47:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Aniline	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Anthracene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Azobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:12:00 PM

Lab ID: 1207940-007

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Carbazole	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Chrysene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/27/2012 7:18:12 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Fluorene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Isophorone	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
1-Methylnaphthalene	5.2	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2-Methylnaphthalene	7.7	2.0		mg/Kg	5	7/30/2012 5:35:57 PM
2-Methylphenol	1.1	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
3+4-Methylphenol	2.2	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Naphthalene	1.6	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:12:00 PM

Lab ID: 1207940-007

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/27/2012 7:18:12 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/27/2012 7:18:12 PM
Phenanthrene	1.2	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Phenol	2.8	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Pyrene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Pyridine	ND	1.0		mg/Kg	1	7/27/2012 7:18:12 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/27/2012 7:18:12 PM
Surr: 2,4,6-Tribromophenol	62.6	20.1-121		%REC	1	7/27/2012 7:18:12 PM
Surr: 2-Fluorobiphenyl	56.3	19-133		%REC	1	7/27/2012 7:18:12 PM
Surr: 2-Fluorophenol	64.9	20.2-108		%REC	1	7/27/2012 7:18:12 PM
Surr: 4-Terphenyl-d14	69.9	18.9-115		%REC	1	7/27/2012 7:18:12 PM
Surr: Nitrobenzene-d5	74.1	20.8-123		%REC	1	7/27/2012 7:18:12 PM
Surr: Phenol-d5	78.4	19.8-115		%REC	1	7/27/2012 7:18:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	2.9	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Toluene	14	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Ethylbenzene	7.5	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,4-Trimethylbenzene	22	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,3,5-Trimethylbenzene	6.3	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Naphthalene	10	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1-Methylnaphthalene	21	10		mg/Kg	50	7/24/2012 1:29:07 AM
2-Methylnaphthalene	36	10		mg/Kg	50	7/24/2012 1:29:07 AM
Acetone	47	38		mg/Kg	50	7/24/2012 1:29:07 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 1:29:07 AM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:12:00 PM

Lab ID: 1207940-007

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 1:29:07 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Isopropylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 1:29:07 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 1:29:07 AM
n-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
n-Propylbenzene	3.6	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 1:29:07 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-12 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:12:00 PM

Lab ID: 1207940-007

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 1:29:07 AM
Xylenes, Total	36	5.0		mg/Kg	50	7/24/2012 1:29:07 AM
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%REC	50	7/24/2012 1:29:07 AM
Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	50	7/24/2012 1:29:07 AM
Surr: Dibromofluoromethane	103	70-130		%REC	50	7/24/2012 1:29:07 AM
Surr: Toluene-d8	98.4	70-130		%REC	50	7/24/2012 1:29:07 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:36:00 PM

Lab ID: 1207940-008

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1000	99		mg/Kg	10	7/23/2012 7:41:16 AM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/23/2012 7:41:16 AM
Surr: DNOP	0	77.6-140	S	%REC	10	7/23/2012 7:41:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/30/2012 4:37:26 PM
Surr: BFB	129	84-116	S	%REC	10	7/30/2012 4:37:26 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.14	0.033		mg/Kg	1	8/2/2012 9:38:23 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:17:52 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 3:49:23 PM
Barium	350	10		mg/Kg	100	8/5/2012 1:41:23 PM
Beryllium	0.97	0.75		mg/Kg	5	8/4/2012 3:49:23 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:17:52 PM
Chromium	17	1.5		mg/Kg	5	8/1/2012 3:17:52 PM
Cobalt	5.7	1.5		mg/Kg	5	8/4/2012 3:49:23 PM
Iron	8400	500		mg/Kg	500	8/5/2012 1:43:37 PM
Lead	2.0	1.2		mg/Kg	5	8/4/2012 3:49:23 PM
Manganese	340	10		mg/Kg	100	8/5/2012 1:41:23 PM
Nickel	9.1	2.5		mg/Kg	5	8/4/2012 3:49:23 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 3:49:23 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:17:52 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 3:17:52 PM
Zinc	36	12		mg/Kg	5	8/4/2012 3:49:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Aniline	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Azobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:36:00 PM

Lab ID: 1207940-008

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Carbazole	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Chrysene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2012 6:06:31 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Fluorene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Isophorone	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
1-Methylnaphthalene	1.6	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2-Methylnaphthalene	0.81	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Naphthalene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:36:00 PM

Lab ID: 1207940-008

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2012 6:06:31 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:06:31 PM
Phenanthrene	1.4	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Phenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Pyrene	0.21	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Pyridine	ND	0.50		mg/Kg	1	7/30/2012 6:06:31 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:06:31 PM
Surr: 2,4,6-Tribromophenol	57.8	20.1-121		%REC	1	7/30/2012 6:06:31 PM
Surr: 2-Fluorobiphenyl	58.6	19-133		%REC	1	7/30/2012 6:06:31 PM
Surr: 2-Fluorophenol	60.7	20.2-108		%REC	1	7/30/2012 6:06:31 PM
Surr: 4-Terphenyl-d14	79.7	18.9-115		%REC	1	7/30/2012 6:06:31 PM
Surr: Nitrobenzene-d5	68.2	20.8-123		%REC	1	7/30/2012 6:06:31 PM
Surr: Phenol-d5	75.4	19.8-115		%REC	1	7/30/2012 6:06:31 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Toluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Ethylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,4-Trimethylbenzene	3.7	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,3,5-Trimethylbenzene	1.4	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Naphthalene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1-Methylnaphthalene	12	4.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Methylnaphthalene	13	4.0		mg/Kg	20	7/24/2012 3:22:12 AM
Acetone	ND	15		mg/Kg	20	7/24/2012 3:22:12 AM
Bromobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Bromoform	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Bromomethane	ND	3.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Butanone	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Carbon disulfide	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Chlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Chloroethane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:36:00 PM

Lab ID: 1207940-008

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Chloromethane	ND	3.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Dibromomethane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
2-Hexanone	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/24/2012 3:22:12 AM
Methylene chloride	ND	3.0		mg/Kg	20	7/24/2012 3:22:12 AM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Styrene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/24/2012 3:22:12 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:36:00 PM

Lab ID: 1207940-008

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/24/2012 3:22:12 AM
Xylenes, Total	2.4	2.0		mg/Kg	20	7/24/2012 3:22:12 AM
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	20	7/24/2012 3:22:12 AM
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	20	7/24/2012 3:22:12 AM
Surr: Dibromofluoromethane	101	70-130		%REC	20	7/24/2012 3:22:12 AM
Surr: Toluene-d8	102	70-130		%REC	20	7/24/2012 3:22:12 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:45:00 PM

Lab ID: 1207940-009

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1300	99		mg/Kg	10	7/22/2012 8:07:03 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/22/2012 8:07:03 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/22/2012 8:07:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	58	50		mg/Kg	10	7/30/2012 5:07:41 PM
Surr: BFB	122	84-116	S	%REC	10	7/30/2012 5:07:41 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:40:09 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:23:00 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:01:53 PM
Barium	230	0.50		mg/Kg	5	8/4/2012 4:01:53 PM
Beryllium	1.0	0.75		mg/Kg	5	8/4/2012 4:01:53 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:23:00 PM
Chromium	13	1.5		mg/Kg	5	8/1/2012 3:23:00 PM
Cobalt	5.7	1.5		mg/Kg	5	8/4/2012 4:01:53 PM
Iron	16000	500		mg/Kg	500	8/5/2012 1:48:51 PM
Lead	3.3	1.2		mg/Kg	5	8/4/2012 4:01:53 PM
Manganese	390	10		mg/Kg	100	8/5/2012 1:46:28 PM
Nickel	9.5	2.5		mg/Kg	5	8/4/2012 4:01:53 PM
Selenium	ND	12		mg/Kg	5	8/4/2012 4:01:53 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 3:23:00 PM
Vanadium	23	12		mg/Kg	5	8/1/2012 3:23:00 PM
Zinc	19	12		mg/Kg	5	8/4/2012 4:01:53 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Aniline	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Azobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:45:00 PM

Lab ID: 1207940-009

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Carbazole	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Chrysene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2012 6:37:04 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Fluorene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Isophorone	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
1-Methylnaphthalene	1.4	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2-Methylnaphthalene	2.3	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Naphthalene	0.65	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM

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Lab ID: 1207940-009

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2012 6:37:04 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2012 6:37:04 PM
Phenanthrene	0.60	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Phenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Pyrene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Pyridine	ND	0.50		mg/Kg	1	7/30/2012 6:37:04 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 6:37:04 PM
Surr: 2,4,6-Tribromophenol	92.0	20.1-121		%REC	1	7/30/2012 6:37:04 PM
Surr: 2-Fluorobiphenyl	80.4	19-133		%REC	1	7/30/2012 6:37:04 PM
Surr: 2-Fluorophenol	73.8	20.2-108		%REC	1	7/30/2012 6:37:04 PM
Surr: 4-Terphenyl-d14	92.5	18.9-115		%REC	1	7/30/2012 6:37:04 PM
Surr: Nitrobenzene-d5	78.1	20.8-123		%REC	1	7/30/2012 6:37:04 PM
Surr: Phenol-d5	92.9	19.8-115		%REC	1	7/30/2012 6:37:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Toluene	0.61	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Ethylbenzene	1.3	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,4-Trimethylbenzene	3.5	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,3,5-Trimethylbenzene	0.93	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Naphthalene	1.2	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1-Methylnaphthalene	2.6	2.0		mg/Kg	10	7/24/2012 12:36:59 PM
2-Methylnaphthalene	4.6	2.0		mg/Kg	10	7/24/2012 12:36:59 PM
Acetone	ND	7.5		mg/Kg	10	7/24/2012 12:36:59 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Bromoform	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Bromomethane	ND	1.5		mg/Kg	10	7/24/2012 12:36:59 PM
2-Butanone	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Chloroethane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM

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Analytical Report

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Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-13 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:45:00 PM

Lab ID: 1207940-009

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Chloromethane	ND	1.5		mg/Kg	10	7/24/2012 12:36:59 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/24/2012 12:36:59 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/24/2012 12:36:59 PM
n-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
n-Propylbenzene	0.55	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Styrene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/24/2012 12:36:59 PM

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EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.50		mg/Kg	10	7/24/2012 12:36:59 PM
Xylenes, Total	5.5	1.0		mg/Kg	10	7/24/2012 12:36:59 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	10	7/24/2012 12:36:59 PM
Surr: 4-Bromofluorobenzene	83.2	70-130		%REC	10	7/24/2012 12:36:59 PM
Surr: Dibromofluoromethane	105	70-130		%REC	10	7/24/2012 12:36:59 PM
Surr: Toluene-d8	98.8	70-130		%REC	10	7/24/2012 12:36:59 PM

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Matrix: SOIL

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	7700	200		mg/Kg	20	7/23/2012 11:41:16 AM
Motor Oil Range Organics (MRO)	ND	980		mg/Kg	20	7/23/2012 11:41:16 AM
Surr: DNOP	0	77.6-140	S	%REC	20	7/23/2012 11:41:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	450	100		mg/Kg	20	7/30/2012 5:37:48 PM
Surr: BFB	143	84-116	S	%REC	20	7/30/2012 5:37:48 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.33	0.033		mg/Kg	1	8/2/2012 9:41:56 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:37:59 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:37:59 PM
Barium	980	10		mg/Kg	100	8/5/2012 1:51:24 PM
Beryllium	0.93	0.75		mg/Kg	5	8/4/2012 4:04:15 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:37:59 PM
Chromium	18	1.5		mg/Kg	5	8/1/2012 3:37:59 PM
Cobalt	5.7	1.5		mg/Kg	5	8/4/2012 4:04:15 PM
Iron	16000	500		mg/Kg	500	8/5/2012 1:55:14 PM
Lead	3.3	1.2		mg/Kg	5	8/4/2012 4:04:15 PM
Manganese	350	10		mg/Kg	100	8/5/2012 1:51:24 PM
Nickel	9.1	2.5		mg/Kg	5	8/4/2012 4:04:15 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:37:59 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:04:15 PM
Vanadium	27	12		mg/Kg	5	8/1/2012 3:37:59 PM
Zinc	34	12		mg/Kg	5	8/4/2012 4:04:15 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:07:00 PM

Lab ID: 1207940-010

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 7:07:36 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
1-Methylnaphthalene	18	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2-Methylnaphthalene	28	5.0		mg/Kg	5	7/31/2012 1:08:09 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Naphthalene	3.7	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:07:00 PM

Lab ID: 1207940-010

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2012 7:07:36 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:07:36 PM
Phenanthrene	6.6	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Pyrene	1.0	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 7:07:36 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 7:07:36 PM
Surr: 2,4,6-Tribromophenol	37.8	20.1-121		%REC	1	7/30/2012 7:07:36 PM
Surr: 2-Fluorobiphenyl	55.3	19-133		%REC	1	7/30/2012 7:07:36 PM
Surr: 2-Fluorophenol	38.2	20.2-108		%REC	1	7/30/2012 7:07:36 PM
Surr: 4-Terphenyl-d14	75.4	18.9-115		%REC	1	7/30/2012 7:07:36 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/30/2012 7:07:36 PM
Surr: Phenol-d5	50.0	19.8-115		%REC	1	7/30/2012 7:07:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Toluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Ethylbenzene	4.3	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,4-Trimethylbenzene	38	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,3,5-Trimethylbenzene	12	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Naphthalene	11	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1-Methylnaphthalene	31	10		mg/Kg	50	7/24/2012 5:15:17 AM
2-Methylnaphthalene	55	10		mg/Kg	50	7/24/2012 5:15:17 AM
Acetone	ND	38		mg/Kg	50	7/24/2012 5:15:17 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 5:15:17 AM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:07:00 PM

Lab ID: 1207940-010

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 5:15:17 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Isopropylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 5:15:17 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 5:15:17 AM
n-Butylbenzene	3.3	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
n-Propylbenzene	4.0	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:15:17 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:07:00 PM

Lab ID: 1207940-010

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 5:15:17 AM
Xylenes, Total	45	5.0		mg/Kg	50	7/24/2012 5:15:17 AM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	50	7/24/2012 5:15:17 AM
Surr: 4-Bromofluorobenzene	76.0	70-130		%REC	50	7/24/2012 5:15:17 AM
Surr: Dibromofluoromethane	109	70-130		%REC	50	7/24/2012 5:15:17 AM
Surr: Toluene-d8	102	70-130		%REC	50	7/24/2012 5:15:17 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:12:00 PM

Lab ID: 1207940-011

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	2800	99		mg/Kg	10	7/22/2012 9:34:51 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	7/22/2012 9:34:51 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/22/2012 9:34:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	7/30/2012 6:07:52 PM
Surr: BFB	96.8	84-116		%REC	20	7/30/2012 6:07:52 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:43:43 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:42:54 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:42:54 PM
Barium	190	0.50		mg/Kg	5	8/4/2012 4:06:36 PM
Beryllium	1.0	0.75		mg/kg	5	8/15/2012 8:29:04 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:42:54 PM
Chromium	11	1.5		mg/Kg	5	8/1/2012 3:42:54 PM
Cobalt	4.9	1.5		mg/Kg	5	8/4/2012 4:06:36 PM
Iron	14000	500		mg/Kg	500	8/5/2012 1:57:49 PM
Lead	2.9	1.2		mg/Kg	5	8/4/2012 4:06:36 PM
Manganese	240	0.50		mg/Kg	5	8/4/2012 4:06:36 PM
Nickel	8.1	2.5		mg/Kg	5	8/4/2012 4:06:36 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:42:54 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:06:36 PM
Vanadium	21	12		mg/Kg	5	8/1/2012 3:42:54 PM
Zinc	19	12		mg/Kg	5	8/4/2012 4:06:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Acenaphthylene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Aniline	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Anthracene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Azobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:12:00 PM

Lab ID: 1207940-011

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Carbazole	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Chrysene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Dibenzofuran	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 7:38:08 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
Fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Fluorene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Hexachloroethane	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
1-Methylnaphthalene	17	5.0		mg/Kg	5	7/31/2012 1:38:27 PM
2-Methylnaphthalene	27	5.0		mg/Kg	5	7/31/2012 1:38:27 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Naphthalene	4.3	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:12:00 PM

Lab ID: 1207940-011

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 7:38:08 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 7:38:08 PM
Phenanthrene	6.2	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Phenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Pyrene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 7:38:08 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 7:38:08 PM
Surr: 2,4,6-Tribromophenol	91.6	20.1-121		%REC	1	7/30/2012 7:38:08 PM
Surr: 2-Fluorobiphenyl	99.9	19-133		%REC	1	7/30/2012 7:38:08 PM
Surr: 2-Fluorophenol	105	20.2-108		%REC	1	7/30/2012 7:38:08 PM
Surr: 4-Terphenyl-d14	120	18.9-115	S	%REC	1	7/30/2012 7:38:08 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/30/2012 7:38:08 PM
Surr: Phenol-d5	122	19.8-115	S	%REC	1	7/30/2012 7:38:08 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	0.84	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Toluene	0.83	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Ethylbenzene	1.7	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,4-Trimethylbenzene	4.8	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,3,5-Trimethylbenzene	0.87	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Naphthalene	1.4	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1-Methylnaphthalene	3.3	2.0		mg/Kg	10	7/24/2012 1:33:50 PM
2-Methylnaphthalene	6.1	2.0		mg/Kg	10	7/24/2012 1:33:50 PM
Acetone	ND	7.5		mg/Kg	10	7/24/2012 1:33:50 PM
Bromobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Bromoform	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Bromomethane	ND	1.5		mg/Kg	10	7/24/2012 1:33:50 PM
2-Butanone	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Carbon disulfide	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Chlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Chloroethane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM

Qualifiers:

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- E Value above quantitation range
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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:12:00 PM

Lab ID: 1207940-011

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Chloromethane	ND	1.5		mg/Kg	10	7/24/2012 1:33:50 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Dibromomethane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
2-Hexanone	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Isopropylbenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	7/24/2012 1:33:50 PM
Methylene chloride	ND	1.5		mg/Kg	10	7/24/2012 1:33:50 PM
n-Butylbenzene	0.51	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
n-Propylbenzene	0.73	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
sec-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Styrene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	7/24/2012 1:33:50 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-14 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:12:00 PM

Lab ID: 1207940-011

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.50		mg/Kg	10	7/24/2012 1:33:50 PM
Xylenes, Total	5.3	1.0		mg/Kg	10	7/24/2012 1:33:50 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	10	7/24/2012 1:33:50 PM
Surr: 4-Bromofluorobenzene	81.7	70-130		%REC	10	7/24/2012 1:33:50 PM
Surr: Dibromofluoromethane	110	70-130		%REC	10	7/24/2012 1:33:50 PM
Surr: Toluene-d8	103	70-130		%REC	10	7/24/2012 1:33:50 PM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:33:00 PM

Lab ID: 1207940-012

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	350	9.7		mg/Kg	1	7/23/2012 1:01:37 PM
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	7/23/2012 1:01:37 PM
Surr: DNOP	108	77.6-140		%REC	1	7/23/2012 1:01:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/30/2012 6:38:08 PM
Surr: BFB	105	84-116		%REC	5	7/30/2012 6:38:08 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.14	0.033		mg/Kg	1	8/2/2012 9:45:29 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:48:04 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:48:04 PM
Barium	590	2.0		mg/Kg	20	8/5/2012 2:00:21 PM
Beryllium	0.83	0.75		mg/kg	5	8/15/2012 8:33:02 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:48:04 PM
Chromium	21	1.5		mg/Kg	5	8/1/2012 3:48:04 PM
Cobalt	5.4	1.5		mg/Kg	5	8/4/2012 4:09:00 PM
Iron	14000	500		mg/Kg	500	8/5/2012 2:10:31 PM
Lead	7.0	1.2		mg/Kg	5	8/4/2012 4:09:00 PM
Manganese	550	2.0		mg/Kg	20	8/5/2012 2:00:21 PM
Nickel	9.7	2.5		mg/Kg	5	8/4/2012 4:09:00 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:48:04 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:09:00 PM
Vanadium	25	12		mg/Kg	5	8/1/2012 3:48:04 PM
Zinc	59	12		mg/Kg	5	8/4/2012 4:09:00 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:33:00 PM

Lab ID: 1207940-012

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 8:08:37 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:33:00 PM

Lab ID: 1207940-012

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 8:08:37 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:08:37 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 8:08:37 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:08:37 PM
Surr: 2,4,6-Tribromophenol	95.1	20.1-121		%REC	1	7/30/2012 8:08:37 PM
Surr: 2-Fluorobiphenyl	89.2	19-133		%REC	1	7/30/2012 8:08:37 PM
Surr: 2-Fluorophenol	80.1	20.2-108		%REC	1	7/30/2012 8:08:37 PM
Surr: 4-Terphenyl-d14	108	18.9-115		%REC	1	7/30/2012 8:08:37 PM
Surr: Nitrobenzene-d5	97.0	20.8-123		%REC	1	7/30/2012 8:08:37 PM
Surr: Phenol-d5	84.8	19.8-115		%REC	1	7/30/2012 8:08:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Toluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Ethylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Xylenes, Total	ND	2.93		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Methyl tert-butyl ether (MTBE)	ND	1.95		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,4-Trimethylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,3,5-Trimethylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dichloroethane (EDC)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dibromoethane (EDB)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Naphthalene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1-Methylnaphthalene	ND	3.90		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Methylnaphthalene	ND	3.90		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Acetone	ND	29.3		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Bromobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Bromodichloromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Bromoform	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Butanone	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Carbon tetrachloride	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Chlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Chloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Chloroform	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM

Qualifiers:

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- J Analyte detected below quantitation limits
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:33:00 PM

Lab ID: 1207940-012

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Chlorotoluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Carbon disulfide	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
4-Chlorotoluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
cis-1,2-DCE	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
cis-1,3-Dichloropropene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dibromo-3-chloropropane	ND	1.95		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Dibromochloromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Dibromomethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,3-Dichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,4-Dichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Dichlorodifluoromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1-Dichloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1-Dichloroethene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2-Dichloropropane	ND	1.95		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,3-Dichloropropane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2,2-Dichloropropane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1-Dichloropropene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Hexachlorobutadiene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Isopropylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
4-Isopropyltoluene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Methylene chloride	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
n-Butylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
2-Hexanone	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
n-Propylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
sec-Butylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Styrene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
4-Methyl-2-pentanone	ND	4.88		µg/Kg-dry	1	7/26/2012 9:21:01 PM
tert-Butylbenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,1,2-Tetrachloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,2,2-Tetrachloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Tetrachloroethene (PCE)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
trans-1,2-DCE	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
trans-1,3-Dichloropropene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,3-Trichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,4-Trichlorobenzene	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,1-Trichloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,1,2-Trichloroethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Trichloroethene (TCE)	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Trichlorofluoromethane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
1,2,3-Trichloropropane	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:33:00 PM

Lab ID: 1207940-012

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.976		µg/Kg-dry	1	7/26/2012 9:21:01 PM
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	7/26/2012 9:21:01 PM
Surr: 4-Bromofluorobenzene	110	70-130		%REC	1	7/26/2012 9:21:01 PM
Surr: Dibromofluoromethane	86.3	70-130		%REC	1	7/26/2012 9:21:01 PM
Surr: Toluene-d8	93.5	70-130		%REC	1	7/26/2012 9:21:01 PM

Qualifiers:

* / X	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
U	Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:38:00 PM

Lab ID: 1207940-013

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	350	10		mg/Kg	1	7/23/2012 1:27:14 PM
Motor Oil Range Organics (MRO)	80	51		mg/Kg	1	7/23/2012 1:27:14 PM
Surr: DNOP	112	77.6-140		%REC	1	7/23/2012 1:27:14 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	27	25		mg/Kg	5	7/30/2012 7:08:15 PM
Surr: BFB	130	84-116	S	%REC	5	7/30/2012 7:08:15 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.058	0.033		mg/Kg	1	8/2/2012 9:50:48 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:53:08 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:53:08 PM
Barium	620	2.0		mg/Kg	20	8/5/2012 2:13:07 PM
Beryllium	0.84	0.75		mg/kg	5	8/15/2012 8:36:01 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:53:08 PM
Chromium	17	1.5		mg/Kg	5	8/1/2012 3:53:08 PM
Cobalt	4.9	1.5		mg/Kg	5	8/4/2012 4:11:21 PM
Iron	15000	500		mg/Kg	500	8/5/2012 2:15:18 PM
Lead	5.8	1.2		mg/Kg	5	8/4/2012 4:11:21 PM
Manganese	700	2.0		mg/Kg	20	8/5/2012 2:13:07 PM
Nickel	7.9	2.5		mg/Kg	5	8/4/2012 4:11:21 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:53:08 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:11:21 PM
Vanadium	24	12		mg/Kg	5	8/1/2012 3:53:08 PM
Zinc	38	12		mg/Kg	5	8/4/2012 4:11:21 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:38:00 PM

Lab ID: 1207940-013

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 8:39:02 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM

Qualifiers:

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:38:00 PM

Lab ID: 1207940-013

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2012 8:39:02 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 8:39:02 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 8:39:02 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 8:39:02 PM
Surr: 2,4,6-Tribromophenol	95.2	20.1-121		%REC	1	7/30/2012 8:39:02 PM
Surr: 2-Fluorobiphenyl	92.3	19-133		%REC	1	7/30/2012 8:39:02 PM
Surr: 2-Fluorophenol	87.8	20.2-108		%REC	1	7/30/2012 8:39:02 PM
Surr: 4-Terphenyl-d14	106	18.9-115		%REC	1	7/30/2012 8:39:02 PM
Surr: Nitrobenzene-d5	99.5	20.8-123		%REC	1	7/30/2012 8:39:02 PM
Surr: Phenol-d5	86.6	19.8-115		%REC	1	7/30/2012 8:39:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Toluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Ethylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Xylenes, Total	ND	3.75		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Methyl tert-butyl ether (MTBE)	ND	2.50		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,4-Trimethylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,3,5-Trimethylbenzene	7.26	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dichloroethane (EDC)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dibromoethane (EDB)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Naphthalene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1-Methylnaphthalene	15.2	5.00		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Methylnaphthalene	ND	5.00		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Acetone	ND	37.5		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Bromobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Bromodichloromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Bromoform	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Butanone	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Carbon tetrachloride	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Chlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Chloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Chloroform	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:38:00 PM

Lab ID: 1207940-013

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Chlorotoluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Carbon disulfide	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
4-Chlorotoluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
cis-1,2-DCE	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
cis-1,3-Dichloropropene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dibromo-3-chloropropane	ND	2.50		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Dibromochloromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Dibromomethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,3-Dichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,4-Dichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Dichlorodifluoromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1-Dichloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1-Dichloroethene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2-Dichloropropane	ND	2.50		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,3-Dichloropropane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2,2-Dichloropropane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1-Dichloropropene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Hexachlorobutadiene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Isopropylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
4-Isopropyltoluene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Methylene chloride	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
n-Butylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
2-Hexanone	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
n-Propylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
sec-Butylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Styrene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
4-Methyl-2-pentanone	ND	6.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
tert-Butylbenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,1,2-Tetrachloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,2,2-Tetrachloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Tetrachloroethene (PCE)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
trans-1,2-DCE	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
trans-1,3-Dichloropropene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,3-Trichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,4-Trichlorobenzene	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,1-Trichloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,1,2-Trichloroethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Trichloroethene (TCE)	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Trichlorofluoromethane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
1,2,3-Trichloropropane	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-11 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:38:00 PM

Lab ID: 1207940-013

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.25		µg/Kg-dry	1	7/26/2012 9:48:36 PM
Surr: 1,2-Dichloroethane-d4	187	70-130	S	%REC	1	7/26/2012 9:48:36 PM
Surr: 4-Bromofluorobenzene	154	70-130	S	%REC	1	7/26/2012 9:48:36 PM
Surr: Dibromofluoromethane	87.3	70-130		%REC	1	7/26/2012 9:48:36 PM
Surr: Toluene-d8	99.6	70-130		%REC	1	7/26/2012 9:48:36 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:08:00 PM

Lab ID: 1207940-014

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1200	96		mg/Kg	10	7/23/2012 3:37:11 PM
Motor Oil Range Organics (MRO)	680	480		mg/Kg	10	7/23/2012 3:37:11 PM
Surr: DNOP	0	77.6-140	S	%REC	10	7/23/2012 3:37:11 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/30/2012 7:38:29 PM
Surr: BFB	108	84-116		%REC	10	7/30/2012 7:38:29 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.20	0.033		mg/Kg	1	8/2/2012 9:52:34 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 3:58:16 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 3:58:16 PM
Barium	620	2.0		mg/Kg	20	8/5/2012 2:17:56 PM
Beryllium	0.86	0.75		mg/kg	5	8/15/2012 8:38:55 AM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 3:58:16 PM
Chromium	25	1.5		mg/Kg	5	8/1/2012 3:58:16 PM
Cobalt	5.2	1.5		mg/Kg	5	8/4/2012 4:13:45 PM
Iron	16000	500		mg/Kg	500	8/5/2012 2:20:11 PM
Lead	10	1.2		mg/Kg	5	8/4/2012 4:13:45 PM
Manganese	580	2.0		mg/Kg	20	8/5/2012 2:17:56 PM
Nickel	8.5	2.5		mg/Kg	5	8/4/2012 4:13:45 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 3:58:16 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:13:45 PM
Vanadium	30	12		mg/Kg	5	8/1/2012 3:58:16 PM
Zinc	68	12		mg/Kg	5	8/4/2012 4:13:45 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Acenaphthylene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Aniline	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Anthracene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Azobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:08:00 PM

Lab ID: 1207940-014

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Carbazole	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Chrysene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Dibenzofuran	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 9:09:24 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
Fluoranthene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Fluorene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Hexachloroethane	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Naphthalene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:08:00 PM

Lab ID: 1207940-014

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 9:09:24 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:09:24 PM
Phenanthrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Phenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Pyrene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 9:09:24 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	7/30/2012 9:09:24 PM
Surr: 2,4,6-Tribromophenol	90.2	20.1-121		%REC	1	7/30/2012 9:09:24 PM
Surr: 2-Fluorobiphenyl	82.9	19-133		%REC	1	7/30/2012 9:09:24 PM
Surr: 2-Fluorophenol	75.6	20.2-108		%REC	1	7/30/2012 9:09:24 PM
Surr: 4-Terphenyl-d14	97.7	18.9-115		%REC	1	7/30/2012 9:09:24 PM
Surr: Nitrobenzene-d5	84.3	20.8-123		%REC	1	7/30/2012 9:09:24 PM
Surr: Phenol-d5	80.1	19.8-115		%REC	1	7/30/2012 9:09:24 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Toluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Ethylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Xylenes, Total	ND	3.27		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Methyl tert-butyl ether (MTBE)	ND	2.18		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,4-Trimethylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,3,5-Trimethylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dichloroethane (EDC)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dibromoethane (EDB)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Naphthalene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1-Methylnaphthalene	ND	4.36		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Methylnaphthalene	ND	4.36		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Acetone	ND	32.7		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Bromobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Bromodichloromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Bromoform	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Butanone	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Carbon tetrachloride	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Chlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Chloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Chloroform	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:08:00 PM

Lab ID: 1207940-014

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Chlorotoluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Carbon disulfide	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
4-Chlorotoluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
cis-1,2-DCE	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
cis-1,3-Dichloropropene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dibromo-3-chloropropane	ND	2.18		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Dibromochloromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Dibromomethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,3-Dichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,4-Dichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Dichlorodifluoromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1-Dichloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1-Dichloroethene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2-Dichloropropane	ND	2.18		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,3-Dichloropropane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2,2-Dichloropropane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1-Dichloropropene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Hexachlorobutadiene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Isopropylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
4-Isopropyltoluene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Methylene chloride	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
n-Butylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
2-Hexanone	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
n-Propylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
sec-Butylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Styrene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
4-Methyl-2-pentanone	ND	5.45		µg/Kg-dry	1	7/26/2012 10:43:57 PM
tert-Butylbenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,1,2-Tetrachloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,2,2-Tetrachloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Tetrachloroethene (PCE)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
trans-1,2-DCE	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
trans-1,3-Dichloropropene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,3-Trichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,4-Trichlorobenzene	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,1-Trichloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,1,2-Trichloroethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Trichloroethene (TCE)	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Trichlorofluoromethane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
1,2,3-Trichloropropane	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:08:00 PM

Lab ID: 1207940-014

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.09		µg/Kg-dry	1	7/26/2012 10:43:57 PM
Surr: 1,2-Dichloroethane-d4	180	70-130	S	%REC	1	7/26/2012 10:43:57 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	1	7/26/2012 10:43:57 PM
Surr: Dibromofluoromethane	79.8	70-130		%REC	1	7/26/2012 10:43:57 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	7/26/2012 10:43:57 PM

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- S Spike Recovery outside accepted recovery limits

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:15:00 PM

Lab ID: 1207940-015

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	14000	510		mg/Kg	50	7/23/2012 2:15:26 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	7/23/2012 2:15:26 PM
Surr: DNOP	0	77.6-140	S	%REC	50	7/23/2012 2:15:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	570	500		mg/Kg	100	7/30/2012 8:08:47 PM
Surr: BFB	119	84-116	S	%REC	100	7/30/2012 8:08:47 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.15	0.033		mg/Kg	1	8/2/2012 9:54:21 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 4:15:18 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:16:06 PM
Barium	680	2.0		mg/Kg	20	8/5/2012 2:22:47 PM
Beryllium	0.76	0.75		mg/Kg	5	8/4/2012 4:16:06 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:15:18 PM
Chromium	26	1.5		mg/Kg	5	8/1/2012 4:15:18 PM
Cobalt	5.5	1.5		mg/Kg	5	8/4/2012 4:16:06 PM
Iron	15000	500		mg/Kg	500	8/5/2012 2:24:54 PM
Lead	14	1.2		mg/Kg	5	8/4/2012 4:16:06 PM
Manganese	540	2.0		mg/Kg	20	8/5/2012 2:22:47 PM
Nickel	8.9	2.5		mg/Kg	5	8/4/2012 4:16:06 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:15:18 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:16:06 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 4:15:18 PM
Zinc	65	12		mg/Kg	5	8/4/2012 4:16:06 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Aniline	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Anthracene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Azobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzoic acid	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:15:00 PM

Lab ID: 1207940-015

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Carbazole	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Chrysene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/30/2012 9:39:42 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Fluorene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Isophorone	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
1-Methylnaphthalene	4.5	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Methylnaphthalene	7.0	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Methylphenol	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Naphthalene	2.8	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:15:00 PM

Lab ID: 1207940-015

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
Nitrobenzene	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/30/2012 9:39:42 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/30/2012 9:39:42 PM
Phenanthrene	2.2	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Phenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Pyrene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Pyridine	ND	5.0		mg/Kg	1	7/30/2012 9:39:42 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 9:39:42 PM
Surr: 2,4,6-Tribromophenol	0	20.1-121	S	%REC	1	7/30/2012 9:39:42 PM
Surr: 2-Fluorobiphenyl	48.1	19-133		%REC	1	7/30/2012 9:39:42 PM
Surr: 2-Fluorophenol	28.9	20.2-108		%REC	1	7/30/2012 9:39:42 PM
Surr: 4-Terphenyl-d14	50.7	18.9-115		%REC	1	7/30/2012 9:39:42 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/30/2012 9:39:42 PM
Surr: Phenol-d5	33.1	19.8-115		%REC	1	7/30/2012 9:39:42 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Toluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Ethylbenzene	17	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,4-Trimethylbenzene	37	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,3,5-Trimethylbenzene	13	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Naphthalene	8.8	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1-Methylnaphthalene	12	10		mg/Kg	50	7/24/2012 7:08:15 AM
2-Methylnaphthalene	20	10		mg/Kg	50	7/24/2012 7:08:15 AM
Acetone	ND	38		mg/Kg	50	7/24/2012 7:08:15 AM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 7:08:15 AM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:15:00 PM

Lab ID: 1207940-015

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 7:08:15 AM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Isopropylbenzene	3.5	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
4-Isopropyltoluene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 7:08:15 AM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 7:08:15 AM
n-Butylbenzene	2.8	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
n-Propylbenzene	5.7	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
sec-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 7:08:15 AM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-18 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:15:00 PM

Lab ID: 1207940-015

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 7:08:15 AM
Xylenes, Total	53	5.0		mg/Kg	50	7/24/2012 7:08:15 AM
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%REC	50	7/24/2012 7:08:15 AM
Surr: 4-Bromofluorobenzene	86.1	70-130		%REC	50	7/24/2012 7:08:15 AM
Surr: Dibromofluoromethane	108	70-130		%REC	50	7/24/2012 7:08:15 AM
Surr: Toluene-d8	104	70-130		%REC	50	7/24/2012 7:08:15 AM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-016

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	300	10		mg/Kg	1	7/23/2012 12:03:58 PM
Motor Oil Range Organics (MRO)	240	51		mg/Kg	1	7/23/2012 12:03:58 PM
Surr: DNOP	120	77.6-140		%REC	1	7/23/2012 12:03:58 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	20		mg/Kg	4	7/30/2012 8:38:54 PM
Surr: BFB	107	84-116		%REC	4	7/30/2012 8:38:54 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.27	0.033		mg/Kg	1	8/2/2012 9:56:09 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 4:20:29 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:18:27 PM
Barium	490	2.0		mg/Kg	20	8/5/2012 2:29:09 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:18:27 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:20:29 PM
Chromium	63	1.5		mg/Kg	5	8/1/2012 4:20:29 PM
Cobalt	5.3	1.5		mg/Kg	5	8/4/2012 4:18:27 PM
Iron	18000	500		mg/Kg	500	8/5/2012 2:31:23 PM
Lead	14	1.2		mg/Kg	5	8/4/2012 4:18:27 PM
Manganese	550	2.0		mg/Kg	20	8/5/2012 2:29:09 PM
Nickel	9.8	2.5		mg/Kg	5	8/4/2012 4:18:27 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:20:29 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:18:27 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 4:20:29 PM
Zinc	190	12		mg/Kg	5	8/4/2012 4:18:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-016

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 10:09:54 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM

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- E Value above quantitation range
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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-016

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/30/2012 10:09:54 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:09:54 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 10:09:54 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:09:54 PM
Surr: 2,4,6-Tribromophenol	77.6	20.1-121		%REC	1	7/30/2012 10:09:54 PM
Surr: 2-Fluorobiphenyl	77.9	19-133		%REC	1	7/30/2012 10:09:54 PM
Surr: 2-Fluorophenol	68.0	20.2-108		%REC	1	7/30/2012 10:09:54 PM
Surr: 4-Terphenyl-d14	76.2	18.9-115		%REC	1	7/30/2012 10:09:54 PM
Surr: Nitrobenzene-d5	76.9	20.8-123		%REC	1	7/30/2012 10:09:54 PM
Surr: Phenol-d5	67.6	19.8-115		%REC	1	7/30/2012 10:09:54 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Toluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Ethylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Xylenes, Total	ND	3.68		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Methyl tert-butyl ether (MTBE)	ND	2.45		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,4-Trimethylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,3,5-Trimethylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dichloroethane (EDC)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dibromoethane (EDB)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Naphthalene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1-Methylnaphthalene	ND	4.90		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Methylnaphthalene	ND	4.90		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Acetone	ND	36.8		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Bromobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Bromodichloromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Bromoform	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Butanone	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Carbon tetrachloride	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Chlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Chloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Chloroform	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-016

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Chlorotoluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Carbon disulfide	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
4-Chlorotoluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
cis-1,2-DCE	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
cis-1,3-Dichloropropene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dibromo-3-chloropropane	ND	2.45		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Dibromochloromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Dibromomethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,3-Dichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,4-Dichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Dichlorodifluoromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1-Dichloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1-Dichloroethene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2-Dichloropropane	ND	2.45		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,3-Dichloropropane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2,2-Dichloropropane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1-Dichloropropene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Hexachlorobutadiene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Isopropylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
4-Isopropyltoluene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Methylene chloride	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
n-Butylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
2-Hexanone	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
n-Propylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
sec-Butylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Styrene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
4-Methyl-2-pentanone	ND	6.13		µg/Kg-dry	1	7/26/2012 11:11:45 PM
tert-Butylbenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,1,2-Tetrachloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,2,2-Tetrachloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Tetrachloroethene (PCE)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
trans-1,2-DCE	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
trans-1,3-Dichloropropene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,3-Trichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,4-Trichlorobenzene	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,1-Trichloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,1,2-Trichloroethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Trichloroethene (TCE)	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Trichlorofluoromethane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
1,2,3-Trichloropropane	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-016

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.23		µg/Kg-dry	1	7/26/2012 11:11:45 PM
Surr: 1,2-Dichloroethane-d4	179	70-130	S	%REC	1	7/26/2012 11:11:45 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/26/2012 11:11:45 PM
Surr: Dibromofluoromethane	85.3	70-130		%REC	1	7/26/2012 11:11:45 PM
Surr: Toluene-d8	97.3	70-130		%REC	1	7/26/2012 11:11:45 PM

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- S Spike Recovery outside accepted recovery limits

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-017

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	280	9.8		mg/Kg	1	7/23/2012 1:53:07 PM
Motor Oil Range Organics (MRO)	220	49		mg/Kg	1	7/23/2012 1:53:07 PM
Surr: DNOP	112	77.6-140		%REC	1	7/23/2012 1:53:07 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	20		mg/Kg	4	7/31/2012 12:40:15 AM
Surr: BFB	101	84-116		%REC	4	7/31/2012 12:40:15 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.23	0.033		mg/Kg	1	8/2/2012 9:57:56 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 4:25:31 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:20:48 PM
Barium	460	2.0		mg/Kg	20	8/5/2012 2:33:58 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:20:48 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:25:31 PM
Chromium	29	1.5		mg/Kg	5	8/1/2012 4:25:31 PM
Cobalt	3.9	1.5		mg/Kg	5	8/4/2012 4:20:48 PM
Iron	12000	500		mg/Kg	500	8/5/2012 2:44:11 PM
Lead	9.9	1.2		mg/Kg	5	8/4/2012 4:20:48 PM
Manganese	870	2.0		mg/Kg	20	8/5/2012 2:33:58 PM
Nickel	7.1	2.5		mg/Kg	5	8/4/2012 4:20:48 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:25:31 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:20:48 PM
Vanadium	19	12		mg/Kg	5	8/1/2012 4:25:31 PM
Zinc	160	12		mg/Kg	5	8/4/2012 4:20:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Aniline	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Azobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM

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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-017

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Carbazole	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Chrysene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/30/2012 10:40:02 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Fluorene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Isophorone	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Naphthalene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-017

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/30/2012 10:40:02 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/30/2012 10:40:02 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Phenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Pyrene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Pyridine	ND	2.5		mg/Kg	1	7/30/2012 10:40:02 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/30/2012 10:40:02 PM
Surr: 2,4,6-Tribromophenol	89.3	20.1-121		%REC	1	7/30/2012 10:40:02 PM
Surr: 2-Fluorobiphenyl	81.6	19-133		%REC	1	7/30/2012 10:40:02 PM
Surr: 2-Fluorophenol	78.7	20.2-108		%REC	1	7/30/2012 10:40:02 PM
Surr: 4-Terphenyl-d14	78.3	18.9-115		%REC	1	7/30/2012 10:40:02 PM
Surr: Nitrobenzene-d5	85.1	20.8-123		%REC	1	7/30/2012 10:40:02 PM
Surr: Phenol-d5	76.1	19.8-115		%REC	1	7/30/2012 10:40:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Toluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Ethylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Xylenes, Total	ND	2.62		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Methyl tert-butyl ether (MTBE)	ND	1.75		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,4-Trimethylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,3,5-Trimethylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dichloroethane (EDC)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dibromoethane (EDB)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Naphthalene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1-Methylnaphthalene	ND	3.49		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Methylnaphthalene	ND	3.49		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Acetone	ND	26.2		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Bromobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Bromodichloromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Bromoform	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Butanone	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Carbon tetrachloride	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Chlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Chloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Chloroform	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-017

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Chlorotoluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Carbon disulfide	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
4-Chlorotoluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
cis-1,2-DCE	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
cis-1,3-Dichloropropene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dibromo-3-chloropropane	ND	1.75		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Dibromochloromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Dibromomethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,3-Dichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,4-Dichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Dichlorodifluoromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1-Dichloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1-Dichloroethene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2-Dichloropropane	ND	1.75		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,3-Dichloropropane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2,2-Dichloropropane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1-Dichloropropene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Hexachlorobutadiene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Isopropylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
4-Isopropyltoluene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Methylene chloride	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
n-Butylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
2-Hexanone	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
n-Propylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
sec-Butylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Styrene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
4-Methyl-2-pentanone	ND	4.37		µg/Kg-dry	1	7/26/2012 11:39:28 PM
tert-Butylbenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,1,2-Tetrachloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,2,2-Tetrachloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Tetrachloroethene (PCE)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
trans-1,2-DCE	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
trans-1,3-Dichloropropene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,3-Trichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,4-Trichlorobenzene	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,1-Trichloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,1,2-Trichloroethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Trichloroethene (TCE)	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Trichlorofluoromethane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
1,2,3-Trichloropropane	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 3:00:00 PM

Lab ID: 1207940-017

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.873		µg/Kg-dry	1	7/26/2012 11:39:28 PM
Surr: 1,2-Dichloroethane-d4	182	70-130	S	%REC	1	7/26/2012 11:39:28 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1	7/26/2012 11:39:28 PM
Surr: Dibromofluoromethane	85.8	70-130		%REC	1	7/26/2012 11:39:28 PM
Surr: Toluene-d8	94.2	70-130		%REC	1	7/26/2012 11:39:28 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:06:00 PM

Lab ID: 1207940-018

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	53	10		mg/Kg	1	7/23/2012 9:56:26 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/23/2012 9:56:26 AM
Surr: DNOP	108	77.6-140		%REC	1	7/23/2012 9:56:26 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/31/2012 1:10:26 AM
Surr: BFB	118	84-116	S	%REC	1	7/31/2012 1:10:26 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 9:59:44 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 4:30:33 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:23:19 PM
Barium	340	2.0		mg/Kg	20	8/5/2012 2:46:45 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:23:19 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:30:33 PM
Chromium	11	1.5		mg/Kg	5	8/1/2012 4:30:33 PM
Cobalt	4.6	1.5		mg/Kg	5	8/4/2012 4:23:19 PM
Iron	13000	500		mg/Kg	500	8/5/2012 2:48:56 PM
Lead	2.5	1.2		mg/Kg	5	8/4/2012 4:23:19 PM
Manganese	450	2.0		mg/Kg	20	8/5/2012 2:46:45 PM
Nickel	7.1	2.5		mg/Kg	5	8/4/2012 4:23:19 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:30:33 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:23:19 PM
Vanadium	26	12		mg/Kg	5	8/1/2012 4:30:33 PM
Zinc	20	12		mg/Kg	5	8/4/2012 4:23:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Aniline	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Anthracene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Azobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:06:00 PM

Lab ID: 1207940-018

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Carbazole	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Chrysene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/30/2012 11:10:04 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Fluorene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Isophorone	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Naphthalene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:06:00 PM

Lab ID: 1207940-018

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/30/2012 11:10:04 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/30/2012 11:10:04 PM
Phenanthrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Phenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Pyrene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Pyridine	ND	0.50		mg/Kg	1	7/30/2012 11:10:04 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/30/2012 11:10:04 PM
Surr: 2,4,6-Tribromophenol	81.4	20.1-121		%REC	1	7/30/2012 11:10:04 PM
Surr: 2-Fluorobiphenyl	67.6	19-133		%REC	1	7/30/2012 11:10:04 PM
Surr: 2-Fluorophenol	59.3	20.2-108		%REC	1	7/30/2012 11:10:04 PM
Surr: 4-Terphenyl-d14	71.8	18.9-115		%REC	1	7/30/2012 11:10:04 PM
Surr: Nitrobenzene-d5	70.4	20.8-123		%REC	1	7/30/2012 11:10:04 PM
Surr: Phenol-d5	64.0	19.8-115		%REC	1	7/30/2012 11:10:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Toluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Naphthalene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:30:42 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:30:42 PM
Acetone	ND	0.75		mg/Kg	1	7/24/2012 2:30:42 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Bromoform	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Bromomethane	ND	0.15		mg/Kg	1	7/24/2012 2:30:42 PM
2-Butanone	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Chloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:06:00 PM

Lab ID: 1207940-018

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Chloromethane	ND	0.15		mg/Kg	1	7/24/2012 2:30:42 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/24/2012 2:30:42 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/24/2012 2:30:42 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Styrene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-5 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:06:00 PM

Lab ID: 1207940-018

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.050		mg/Kg	1	7/24/2012 2:30:42 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/24/2012 2:30:42 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	7/24/2012 2:30:42 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1	7/24/2012 2:30:42 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/24/2012 2:30:42 PM
Surr: Toluene-d8	105	70-130		%REC	1	7/24/2012 2:30:42 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:26:00 PM

Lab ID: 1207940-019

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/23/2012 2:19:03 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/23/2012 2:19:03 PM
Surr: DNOP	109	77.6-140		%REC	1	7/23/2012 2:19:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 2:47:18 PM
Surr: BFB	104	84-116		%REC	1	7/30/2012 2:47:18 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:01:33 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 4:35:32 PM
Arsenic	ND	12		mg/Kg	5	8/4/2012 4:37:38 PM
Barium	180	0.50		mg/Kg	5	8/4/2012 4:37:38 PM
Beryllium	ND	0.75		mg/Kg	5	8/4/2012 4:37:38 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 4:35:32 PM
Chromium	6.6	1.5		mg/Kg	5	8/1/2012 4:35:32 PM
Cobalt	3.2	1.5		mg/Kg	5	8/4/2012 4:37:38 PM
Iron	8200	500		mg/kg	500	8/15/2012 8:55:15 AM
Lead	2.2	1.2		mg/Kg	5	8/4/2012 4:37:38 PM
Manganese	300	2.0		mg/kg	20	8/15/2012 8:41:50 AM
Nickel	6.9	2.5		mg/Kg	5	8/4/2012 4:37:38 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 4:35:32 PM
Silver	ND	1.2		mg/Kg	5	8/4/2012 4:37:38 PM
Vanadium	22	12		mg/Kg	5	8/1/2012 4:35:32 PM
Zinc	18	12		mg/Kg	5	8/4/2012 4:37:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:26:00 PM

Lab ID: 1207940-019

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 2:08:54 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Naphthalene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:26:00 PM

Lab ID: 1207940-019

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 2:08:54 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 2:08:54 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 2:08:54 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 2:08:54 PM
Surr: 2,4,6-Tribromophenol	96.3	20.1-121		%REC	1	7/31/2012 2:08:54 PM
Surr: 2-Fluorobiphenyl	94.1	19-133		%REC	1	7/31/2012 2:08:54 PM
Surr: 2-Fluorophenol	84.0	20.2-108		%REC	1	7/31/2012 2:08:54 PM
Surr: 4-Terphenyl-d14	106	18.9-115		%REC	1	7/31/2012 2:08:54 PM
Surr: Nitrobenzene-d5	93.7	20.8-123		%REC	1	7/31/2012 2:08:54 PM
Surr: Phenol-d5	84.7	19.8-115		%REC	1	7/31/2012 2:08:54 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Toluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Naphthalene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:59:07 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/24/2012 2:59:07 PM
Acetone	ND	0.75		mg/Kg	1	7/24/2012 2:59:07 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Bromoform	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Bromomethane	ND	0.15		mg/Kg	1	7/24/2012 2:59:07 PM
2-Butanone	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Chloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM

Qualifiers:

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- E Value above quantitation range
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:26:00 PM

Lab ID: 1207940-019

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Chloromethane	ND	0.15		mg/Kg	1	7/24/2012 2:59:07 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/24/2012 2:59:07 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/24/2012 2:59:07 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Styrene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:26:00 PM

Lab ID: 1207940-019

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.050		mg/Kg	1	7/24/2012 2:59:07 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/24/2012 2:59:07 PM
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	1	7/24/2012 2:59:07 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	1	7/24/2012 2:59:07 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	7/24/2012 2:59:07 PM
Surr: Toluene-d8	97.9	70-130		%REC	1	7/24/2012 2:59:07 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:33:00 PM

Lab ID: 1207940-020

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	29	9.8		mg/Kg	1	7/23/2012 4:03:03 PM
Motor Oil Range Organics (MRO)	51	49		mg/Kg	1	7/23/2012 4:03:03 PM
Surr: DNOP	110	77.6-140		%REC	1	7/23/2012 4:03:03 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 3:16:07 PM
Surr: BFB	101	84-116		%REC	1	7/30/2012 3:16:07 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.063	0.033		mg/Kg	1	8/2/2012 10:03:21 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/1/2012 2:07:41 PM
Arsenic	ND	12		mg/Kg	5	8/1/2012 2:07:41 PM
Barium	790	5.0		mg/kg	50	8/18/2012 11:41:55 AM
Beryllium	0.81	0.75		mg/Kg	5	8/1/2012 2:07:41 PM
Cadmium	ND	0.50		mg/Kg	5	8/1/2012 2:07:41 PM
Chromium	12	1.5		mg/Kg	5	8/1/2012 2:07:41 PM
Cobalt	4.8	1.5		mg/Kg	5	8/1/2012 2:07:41 PM
Iron	12000	500		mg/kg	500	8/18/2012 11:44:19 AM
Lead	4.1	1.2		mg/Kg	5	8/1/2012 2:07:41 PM
Manganese	640	5.0		mg/kg	50	8/18/2012 11:41:55 AM
Nickel	8.0	2.5		mg/Kg	5	8/1/2012 2:07:41 PM
Selenium	ND	12		mg/Kg	5	8/1/2012 2:07:41 PM
Silver	ND	1.2		mg/Kg	5	8/1/2012 2:07:41 PM
Vanadium	21	12		mg/Kg	5	8/1/2012 2:07:41 PM
Zinc	34	12		mg/Kg	5	8/1/2012 2:07:41 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Aniline	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Anthracene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Azobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Benzoic acid	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:33:00 PM

Lab ID: 1207940-020

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Carbazole	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Chloro-3-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
4-Chloroaniline	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Chrysene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Di-n-butyl phthalate	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/31/2012 3:40:39 PM
4,6-Dinitro-2-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2,6-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Fluorene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Isophorone	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2-Methylphenol	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Naphthalene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:33:00 PM

Lab ID: 1207940-020

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
Nitrobenzene	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/31/2012 3:40:39 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/31/2012 3:40:39 PM
Phenanthrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Phenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Pyrene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Pyridine	ND	4.9		mg/Kg	1	7/31/2012 3:40:39 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 3:40:39 PM
Surr: 2,4,6-Tribromophenol	89.5	20.1-121		%REC	1	7/31/2012 3:40:39 PM
Surr: 2-Fluorobiphenyl	98.4	19-133		%REC	1	7/31/2012 3:40:39 PM
Surr: 2-Fluorophenol	93.9	20.2-108		%REC	1	7/31/2012 3:40:39 PM
Surr: 4-Terphenyl-d14	136	18.9-115	S	%REC	1	7/31/2012 3:40:39 PM
Surr: Nitrobenzene-d5	104	20.8-123		%REC	1	7/31/2012 3:40:39 PM
Surr: Phenol-d5	91.9	19.8-115		%REC	1	7/31/2012 3:40:39 PM
EPA METHOD 8260B: VOLATILES						Analyst: JDJ
Benzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Toluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Naphthalene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 2:29:14 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/25/2012 2:29:14 PM
Acetone	ND	0.75		mg/Kg	1	7/25/2012 2:29:14 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Bromoform	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Bromomethane	ND	0.15		mg/Kg	1	7/25/2012 2:29:14 PM
2-Butanone	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Chloroethane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:33:00 PM

Lab ID: 1207940-020

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: JDJ
Chloroform	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Chloromethane	ND	0.15		mg/Kg	1	7/25/2012 2:29:14 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/25/2012 2:29:14 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/25/2012 2:29:14 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Styrene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-19 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:33:00 PM

Lab ID: 1207940-020

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: JDJ
Vinyl chloride	ND	0.050		mg/Kg	1	7/25/2012 2:29:14 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/25/2012 2:29:14 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	7/25/2012 2:29:14 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/25/2012 2:29:14 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	7/25/2012 2:29:14 PM
Surr: Toluene-d8	104	70-130		%REC	1	7/25/2012 2:29:14 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:11:00 PM

Lab ID: 1207940-021

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	2900	190		mg/Kg	20	7/24/2012 3:30:47 PM
Motor Oil Range Organics (MRO)	2800	970		mg/Kg	20	7/24/2012 3:30:47 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/24/2012 3:30:47 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/30/2012 3:44:56 PM
Surr: BFB	102	84-116		%REC	5	7/30/2012 3:44:56 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	1.3	0.16		mg/Kg	5	8/2/2012 10:26:54 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:04:02 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:04:02 PM
Barium	850	5.0		mg/Kg	50	8/6/2012 4:20:43 PM
Beryllium	0.86	0.75		mg/Kg	5	8/5/2012 5:04:02 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:04:02 PM
Chromium	20	1.5		mg/Kg	5	8/5/2012 5:04:02 PM
Cobalt	5.4	1.5		mg/Kg	5	8/5/2012 5:04:02 PM
Iron	17000	500		mg/Kg	500	8/6/2012 4:23:05 PM
Lead	7.1	1.2		mg/Kg	5	8/5/2012 5:04:02 PM
Manganese	560	5.0		mg/Kg	50	8/6/2012 4:20:43 PM
Nickel	12	2.5		mg/Kg	5	8/5/2012 5:04:02 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:04:02 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:04:02 PM
Vanadium	28	12		mg/Kg	5	8/5/2012 5:04:02 PM
Zinc	230	12		mg/Kg	5	8/5/2012 5:04:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Acenaphthylene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Aniline	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Anthracene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Azobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Benzoic acid	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:11:00 PM

Lab ID: 1207940-021

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Carbazole	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Chloro-3-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
4-Chloroaniline	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Chrysene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Di-n-butyl phthalate	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
Di-n-octyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Dibenzofuran	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	7/31/2012 4:11:12 PM
4,6-Dinitro-2-methylphenol	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2,6-Dinitrotoluene	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
Fluoranthene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Fluorene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Hexachloroethane	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Isophorone	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2-Methylphenol	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Naphthalene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:11:00 PM

Lab ID: 1207940-021

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
Nitrobenzene	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	7/31/2012 4:11:12 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	7/31/2012 4:11:12 PM
Phenanthrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Phenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Pyrene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Pyridine	ND	4.9		mg/Kg	1	7/31/2012 4:11:12 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:11:12 PM
Surr: 2,4,6-Tribromophenol	118	20.1-121		%REC	1	7/31/2012 4:11:12 PM
Surr: 2-Fluorobiphenyl	101	19-133		%REC	1	7/31/2012 4:11:12 PM
Surr: 2-Fluorophenol	88.9	20.2-108		%REC	1	7/31/2012 4:11:12 PM
Surr: 4-Terphenyl-d14	130	18.9-115	S	%REC	1	7/31/2012 4:11:12 PM
Surr: Nitrobenzene-d5	104	20.8-123		%REC	1	7/31/2012 4:11:12 PM
Surr: Phenol-d5	86.7	19.8-115		%REC	1	7/31/2012 4:11:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	1.29	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Toluene	2.73	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Ethylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Xylenes, Total	ND	3.05		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Methyl tert-butyl ether (MTBE)	ND	2.03		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,4-Trimethylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,3,5-Trimethylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dichloroethane (EDC)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dibromoethane (EDB)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Naphthalene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1-Methylnaphthalene	ND	4.07		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Methylnaphthalene	ND	4.07		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Acetone	ND	30.5		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Bromobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Bromodichloromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Bromoform	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Butanone	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Carbon tetrachloride	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Chlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Chloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Chloroform	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:11:00 PM

Lab ID: 1207940-021

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Chlorotoluene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Carbon disulfide	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
4-Chlorotoluene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
cis-1,2-DCE	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
cis-1,3-Dichloropropene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dibromo-3-chloropropane	ND	2.03		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Dibromochloromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Dibromomethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,3-Dichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,4-Dichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Dichlorodifluoromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1-Dichloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1-Dichloroethene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2-Dichloropropane	ND	2.03		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,3-Dichloropropane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2,2-Dichloropropane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1-Dichloropropene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Hexachlorobutadiene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Isopropylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
4-Isopropyltoluene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Methylene chloride	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
n-Butylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
2-Hexanone	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
n-Propylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
sec-Butylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Styrene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
4-Methyl-2-pentanone	ND	5.09		µg/Kg-dry	1	7/27/2012 12:07:10 AM
tert-Butylbenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,1,2-Tetrachloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,2,2-Tetrachloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Tetrachloroethene (PCE)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
trans-1,2-DCE	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
trans-1,3-Dichloropropene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,3-Trichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,4-Trichlorobenzene	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,1-Trichloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,1,2-Trichloroethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Trichloroethene (TCE)	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Trichlorofluoromethane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
1,2,3-Trichloropropane	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:11:00 PM

Lab ID: 1207940-021

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.02		µg/Kg-dry	1	7/27/2012 12:07:10 AM
Surr: 1,2-Dichloroethane-d4	188	70-130	S	%REC	1	7/27/2012 12:07:10 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	7/27/2012 12:07:10 AM
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	7/27/2012 12:07:10 AM
Surr: Toluene-d8	99.4	70-130		%REC	1	7/27/2012 12:07:10 AM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:18:00 PM

Lab ID: 1207940-022

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	13000	500		mg/Kg	50	7/24/2012 1:53:49 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	7/24/2012 1:53:49 PM
Surr: DNOP	0	77.6-140	S	%REC	50	7/24/2012 1:53:49 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/30/2012 4:13:41 PM
Surr: BFB	129	84-116	S	%REC	50	7/30/2012 4:13:41 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.12	0.033		mg/Kg	1	8/2/2012 10:14:21 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:09:28 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:09:28 PM
Barium	600	5.0		mg/Kg	50	8/8/2012 9:31:51 AM
Beryllium	0.87	0.75		mg/Kg	5	8/5/2012 5:09:28 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:09:28 PM
Chromium	25	1.5		mg/Kg	5	8/5/2012 5:09:28 PM
Cobalt	5.4	1.5		mg/Kg	5	8/5/2012 5:09:28 PM
Iron	15000	500		mg/Kg	500	8/8/2012 9:34:20 AM
Lead	3.2	1.2		mg/Kg	5	8/5/2012 5:09:28 PM
Manganese	640	5.0		mg/Kg	50	8/8/2012 9:31:51 AM
Nickel	8.7	2.5		mg/Kg	5	8/5/2012 5:09:28 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:09:28 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:09:28 PM
Vanadium	27	12		mg/Kg	5	8/5/2012 5:09:28 PM
Zinc	37	12		mg/Kg	5	8/5/2012 5:09:28 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:18:00 PM

Lab ID: 1207940-022

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 4:41:47 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Fluorene	3.0	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
1-Methylnaphthalene	29	5.0		mg/Kg	5	8/1/2012 7:00:40 PM
2-Methylnaphthalene	38	5.0		mg/Kg	5	8/1/2012 7:00:40 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Naphthalene	7.1	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:18:00 PM

Lab ID: 1207940-022

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 4:41:47 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 4:41:47 PM
Phenanthrene	9.8	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Pyrene	2.6	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 4:41:47 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 4:41:47 PM
Surr: 2,4,6-Tribromophenol	0	20.1-121	S	%REC	1	7/31/2012 4:41:47 PM
Surr: 2-Fluorobiphenyl	35.8	19-133		%REC	1	7/31/2012 4:41:47 PM
Surr: 2-Fluorophenol	47.7	20.2-108		%REC	1	7/31/2012 4:41:47 PM
Surr: 4-Terphenyl-d14	59.1	18.9-115		%REC	1	7/31/2012 4:41:47 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/31/2012 4:41:47 PM
Surr: Phenol-d5	56.3	19.8-115		%REC	1	7/31/2012 4:41:47 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	1.6	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Toluene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Ethylbenzene	13	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,4-Trimethylbenzene	33	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,3,5-Trimethylbenzene	7.8	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Naphthalene	17	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1-Methylnaphthalene	38	4.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Methylnaphthalene	60	4.0		mg/Kg	20	7/30/2012 3:17:50 PM
Acetone	ND	15		mg/Kg	20	7/30/2012 3:17:50 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Bromoform	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Bromomethane	ND	3.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Butanone	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Carbon disulfide	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Chloroethane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit
 U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:18:00 PM

Lab ID: 1207940-022

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Chloroform	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Chloromethane	ND	3.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
2-Hexanone	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Isopropylbenzene	2.9	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
4-Isopropyltoluene	2.7	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/30/2012 3:17:50 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/30/2012 3:17:50 PM
n-Butylbenzene	4.6	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
n-Propylbenzene	4.9	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
sec-Butylbenzene	2.9	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Styrene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,1,2-Trichloroethane	1.0	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/30/2012 3:17:50 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-17 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:18:00 PM

Lab ID: 1207940-022

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Vinyl chloride	ND	1.0		mg/Kg	20	7/30/2012 3:17:50 PM
Xylenes, Total	14	2.0		mg/Kg	20	7/30/2012 3:17:50 PM
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%REC	20	7/30/2012 3:17:50 PM
Surr: 4-Bromofluorobenzene	66.9	70-130	S	%REC	20	7/30/2012 3:17:50 PM
Surr: Dibromofluoromethane	90.6	70-130		%REC	20	7/30/2012 3:17:50 PM
Surr: Toluene-d8	101	70-130		%REC	20	7/30/2012 3:17:50 PM

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- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:45:00 PM

Lab ID: 1207940-023

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	480	49		mg/Kg	5	7/24/2012 3:08:41 PM
Motor Oil Range Organics (MRO)	480	240		mg/Kg	5	7/24/2012 3:08:41 PM
Surr: DNOP	0	77.6-140	S	%REC	5	7/24/2012 3:08:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/30/2012 4:42:30 PM
Surr: BFB	101	84-116		%REC	5	7/30/2012 4:42:30 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.062	0.033		mg/Kg	1	8/2/2012 10:16:09 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:11:50 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:11:50 PM
Barium	550	5.0		mg/Kg	50	8/8/2012 9:37:03 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:11:50 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:11:50 PM
Chromium	13	1.5		mg/Kg	5	8/5/2012 5:11:50 PM
Cobalt	4.4	1.5		mg/Kg	5	8/5/2012 5:11:50 PM
Iron	11000	500		mg/Kg	500	8/8/2012 9:39:29 AM
Lead	4.8	1.2		mg/Kg	5	8/5/2012 5:11:50 PM
Manganese	1100	5.0		mg/Kg	50	8/8/2012 9:37:03 AM
Nickel	6.9	2.5		mg/Kg	5	8/5/2012 5:11:50 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:11:50 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:11:50 PM
Vanadium	22	12		mg/Kg	5	8/5/2012 5:11:50 PM
Zinc	69	12		mg/Kg	5	8/5/2012 5:11:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:45:00 PM

Lab ID: 1207940-023

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 5:12:23 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Naphthalene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:45:00 PM

Lab ID: 1207940-023

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 5:12:23 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:12:23 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 5:12:23 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:12:23 PM
Surr: 2,4,6-Tribromophenol	92.8	20.1-121		%REC	1	7/31/2012 5:12:23 PM
Surr: 2-Fluorobiphenyl	84.4	19-133		%REC	1	7/31/2012 5:12:23 PM
Surr: 2-Fluorophenol	72.7	20.2-108		%REC	1	7/31/2012 5:12:23 PM
Surr: 4-Terphenyl-d14	98.2	18.9-115		%REC	1	7/31/2012 5:12:23 PM
Surr: Nitrobenzene-d5	83.0	20.8-123		%REC	1	7/31/2012 5:12:23 PM
Surr: Phenol-d5	77.1	19.8-115		%REC	1	7/31/2012 5:12:23 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Toluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Ethylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Xylenes, Total	ND	2.72		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Methyl tert-butyl ether (MTBE)	ND	1.81		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,4-Trimethylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,3,5-Trimethylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dichloroethane (EDC)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dibromoethane (EDB)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Naphthalene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1-Methylnaphthalene	ND	3.62		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Methylnaphthalene	ND	3.62		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Acetone	ND	27.2		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Bromobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Bromodichloromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Bromoform	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Butanone	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Carbon tetrachloride	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Chlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Chloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Chloroform	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:45:00 PM

Lab ID: 1207940-023

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Chlorotoluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Carbon disulfide	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
4-Chlorotoluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
cis-1,2-DCE	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
cis-1,3-Dichloropropene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dibromo-3-chloropropane	ND	1.81		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Dibromochloromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Dibromomethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,3-Dichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,4-Dichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Dichlorodifluoromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1-Dichloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1-Dichloroethene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2-Dichloropropane	ND	1.81		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,3-Dichloropropane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2,2-Dichloropropane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1-Dichloropropene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Hexachlorobutadiene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Isopropylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
4-Isopropyltoluene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Methylene chloride	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
n-Butylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
2-Hexanone	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
n-Propylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
sec-Butylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Styrene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
4-Methyl-2-pentanone	ND	4.53		µg/Kg-dry	1	7/27/2012 1:58:11 AM
tert-Butylbenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,1,2-Tetrachloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,2,2-Tetrachloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Tetrachloroethene (PCE)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
trans-1,2-DCE	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
trans-1,3-Dichloropropene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,3-Trichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,4-Trichlorobenzene	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,1-Trichloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,1,2-Trichloroethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Trichloroethene (TCE)	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Trichlorofluoromethane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
1,2,3-Trichloropropane	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:45:00 PM

Lab ID: 1207940-023

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.906		µg/Kg-dry	1	7/27/2012 1:58:11 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/27/2012 1:58:11 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	7/27/2012 1:58:11 AM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	7/27/2012 1:58:11 AM
Surr: Toluene-d8	101	70-130		%REC	1	7/27/2012 1:58:11 AM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:51:00 PM

Lab ID: 1207940-024

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	4800	200		mg/Kg	20	7/24/2012 1:09:38 PM
Motor Oil Range Organics (MRO)	1100	1000		mg/Kg	20	7/24/2012 1:09:38 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/24/2012 1:09:38 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	7/30/2012 5:11:15 PM
Surr: BFB	102	84-116		%REC	50	7/30/2012 5:11:15 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.052	0.033		mg/Kg	1	8/2/2012 10:17:56 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:14:15 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:14:15 PM
Barium	1000	5.0		mg/Kg	50	8/8/2012 12:12:41 PM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:14:15 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:14:15 PM
Chromium	15	1.5		mg/Kg	5	8/5/2012 5:14:15 PM
Cobalt	4.5	1.5		mg/Kg	5	8/5/2012 5:14:15 PM
Iron	15000	500		mg/Kg	500	8/8/2012 12:15:05 PM
Lead	5.1	1.2		mg/Kg	5	8/5/2012 5:14:15 PM
Manganese	560	5.0		mg/Kg	50	8/8/2012 12:12:41 PM
Nickel	7.1	2.5		mg/Kg	5	8/5/2012 5:14:15 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:14:15 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:14:15 PM
Vanadium	25	12		mg/Kg	5	8/5/2012 5:14:15 PM
Zinc	25	12		mg/Kg	5	8/5/2012 5:14:15 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:51:00 PM

Lab ID: 1207940-024

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 5:42:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
1-Methylnaphthalene	6.3	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2-Methylnaphthalene	6.1	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Naphthalene	1.4	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:51:00 PM

Lab ID: 1207940-024

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/31/2012 5:42:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 5:42:57 PM
Phenanthrene	1.7	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 5:42:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 5:42:57 PM
Surr: 2,4,6-Tribromophenol	89.7	20.1-121		%REC	1	7/31/2012 5:42:57 PM
Surr: 2-Fluorobiphenyl	78.4	19-133		%REC	1	7/31/2012 5:42:57 PM
Surr: 2-Fluorophenol	85.2	20.2-108		%REC	1	7/31/2012 5:42:57 PM
Surr: 4-Terphenyl-d14	102	18.9-115		%REC	1	7/31/2012 5:42:57 PM
Surr: Nitrobenzene-d5	94.4	20.8-123		%REC	1	7/31/2012 5:42:57 PM
Surr: Phenol-d5	84.8	19.8-115		%REC	1	7/31/2012 5:42:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Toluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Ethylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,4-Trimethylbenzene	3.6	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,3,5-Trimethylbenzene	1.1	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Naphthalene	3.9	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1-Methylnaphthalene	12	4.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Methylnaphthalene	9.6	4.0		mg/Kg	20	7/24/2012 4:24:10 PM
Acetone	ND	15		mg/Kg	20	7/24/2012 4:24:10 PM
Bromobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Bromodichloromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Bromoform	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Bromomethane	ND	3.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Butanone	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Carbon disulfide	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Carbon tetrachloride	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Chlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Chloroethane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM

Qualifiers: * / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:51:00 PM

Lab ID: 1207940-024

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Chloromethane	ND	3.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
4-Chlorotoluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
cis-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Dibromochloromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Dibromomethane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1-Dichloroethane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1-Dichloroethene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,3-Dichloropropane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
2,2-Dichloropropane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1-Dichloropropene	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
2-Hexanone	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Isopropylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
4-Isopropyltoluene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
4-Methyl-2-pentanone	ND	10		mg/Kg	20	7/24/2012 4:24:10 PM
Methylene chloride	ND	3.0		mg/Kg	20	7/24/2012 4:24:10 PM
n-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
n-Propylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
sec-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Styrene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
tert-Butylbenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
trans-1,2-DCE	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Trichlorofluoromethane	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-16 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:51:00 PM

Lab ID: 1207940-024

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	1.0		mg/Kg	20	7/24/2012 4:24:10 PM
Xylenes, Total	ND	2.0		mg/Kg	20	7/24/2012 4:24:10 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	20	7/24/2012 4:24:10 PM
Surr: 4-Bromofluorobenzene	83.2	70-130		%REC	20	7/24/2012 4:24:10 PM
Surr: Dibromofluoromethane	105	70-130		%REC	20	7/24/2012 4:24:10 PM
Surr: Toluene-d8	100	70-130		%REC	20	7/24/2012 4:24:10 PM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:14:00 PM

Lab ID: 1207940-025

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	1400	200		mg/Kg	20	7/24/2012 1:31:41 PM
Motor Oil Range Organics (MRO)	ND	990		mg/Kg	20	7/24/2012 1:31:41 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/24/2012 1:31:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	7/30/2012 5:39:56 PM
Surr: BFB	101	84-116		%REC	10	7/30/2012 5:39:56 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.13	0.033		mg/Kg	1	8/2/2012 10:19:43 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:18:23 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:18:23 PM
Barium	670	5.0		mg/Kg	50	8/8/2012 9:42:14 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:18:23 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:18:23 PM
Chromium	14	1.5		mg/Kg	5	8/5/2012 5:18:23 PM
Cobalt	4.7	1.5		mg/Kg	5	8/5/2012 5:18:23 PM
Iron	12000	500		mg/Kg	500	8/8/2012 9:44:39 AM
Lead	4.1	1.2		mg/Kg	5	8/5/2012 5:18:23 PM
Manganese	540	5.0		mg/Kg	50	8/8/2012 9:42:14 AM
Nickel	8.2	2.5		mg/Kg	5	8/5/2012 5:18:23 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:18:23 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:18:23 PM
Vanadium	23	12		mg/Kg	5	8/5/2012 5:18:23 PM
Zinc	140	12		mg/Kg	5	8/5/2012 5:18:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:14:00 PM

Lab ID: 1207940-025

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 6:13:31 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Naphthalene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:14:00 PM

Lab ID: 1207940-025

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/31/2012 6:13:31 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:13:31 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 6:13:31 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:13:31 PM
Surr: 2,4,6-Tribromophenol	86.8	20.1-121		%REC	1	7/31/2012 6:13:31 PM
Surr: 2-Fluorobiphenyl	82.8	19-133		%REC	1	7/31/2012 6:13:31 PM
Surr: 2-Fluorophenol	76.1	20.2-108		%REC	1	7/31/2012 6:13:31 PM
Surr: 4-Terphenyl-d14	113	18.9-115		%REC	1	7/31/2012 6:13:31 PM
Surr: Nitrobenzene-d5	83.7	20.8-123		%REC	1	7/31/2012 6:13:31 PM
Surr: Phenol-d5	80.1	19.8-115		%REC	1	7/31/2012 6:13:31 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Toluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Ethylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Xylenes, Total	ND	2.89		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Methyl tert-butyl ether (MTBE)	ND	1.92		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,4-Trimethylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,3,5-Trimethylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dichloroethane (EDC)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dibromoethane (EDB)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Naphthalene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1-Methylnaphthalene	ND	3.85		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Methylnaphthalene	ND	3.85		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Acetone	ND	28.9		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Bromobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Bromodichloromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Bromoform	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Butanone	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Carbon tetrachloride	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Chlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Chloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Chloroform	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:14:00 PM

Lab ID: 1207940-025

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Chlorotoluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Carbon disulfide	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
4-Chlorotoluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
cis-1,2-DCE	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
cis-1,3-Dichloropropene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dibromo-3-chloropropane	ND	1.92		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Dibromochloromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Dibromomethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,3-Dichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,4-Dichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Dichlorodifluoromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1-Dichloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1-Dichloroethene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2-Dichloropropane	ND	1.92		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,3-Dichloropropane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2,2-Dichloropropane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1-Dichloropropene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Hexachlorobutadiene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Isopropylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
4-Isopropyltoluene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Methylene chloride	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
n-Butylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
2-Hexanone	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
n-Propylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
sec-Butylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Styrene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
4-Methyl-2-pentanone	ND	4.81		µg/Kg-dry	1	7/27/2012 12:34:55 AM
tert-Butylbenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,1,2-Tetrachloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,2,2-Tetrachloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Tetrachloroethene (PCE)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
trans-1,2-DCE	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
trans-1,3-Dichloropropene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,3-Trichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,4-Trichlorobenzene	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,1-Trichloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,1,2-Trichloroethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Trichloroethene (TCE)	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Trichlorofluoromethane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
1,2,3-Trichloropropane	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM

Qualifiers:

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- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:14:00 PM

Lab ID: 1207940-025

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.962		µg/Kg-dry	1	7/27/2012 12:34:55 AM
Surr: 1,2-Dichloroethane-d4	122	70-130		%REC	1	7/27/2012 12:34:55 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	7/27/2012 12:34:55 AM
Surr: Dibromofluoromethane	77.5	70-130		%REC	1	7/27/2012 12:34:55 AM
Surr: Toluene-d8	99.0	70-130		%REC	1	7/27/2012 12:34:55 AM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:19:00 PM

Lab ID: 1207940-026

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	10000	1000		mg/Kg	100	7/24/2012 2:46:24 PM
Motor Oil Range Organics (MRO)	ND	5100		mg/Kg	100	7/24/2012 2:46:24 PM
Surr: DNOP	0	77.6-140	S	%REC	100	7/24/2012 2:46:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1600	500		mg/Kg	100	7/30/2012 6:08:45 PM
Surr: BFB	142	84-116	S	%REC	100	7/30/2012 6:08:45 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.22	0.033		mg/Kg	1	8/2/2012 10:21:30 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:20:48 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:20:48 PM
Barium	650	5.0		mg/Kg	50	8/8/2012 9:47:22 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:20:48 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:20:48 PM
Chromium	8.9	1.5		mg/Kg	5	8/5/2012 5:20:48 PM
Cobalt	3.6	1.5		mg/Kg	5	8/5/2012 5:20:48 PM
Iron	7300	500		mg/Kg	500	8/8/2012 9:49:47 AM
Lead	1.3	1.2		mg/Kg	5	8/5/2012 5:20:48 PM
Manganese	360	5.0		mg/Kg	50	8/8/2012 9:47:22 AM
Nickel	5.6	2.5		mg/Kg	5	8/5/2012 5:20:48 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:20:48 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:20:48 PM
Vanadium	20	12		mg/Kg	5	8/5/2012 5:20:48 PM
Zinc	68	12		mg/Kg	5	8/5/2012 5:20:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Aniline	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Azobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:19:00 PM

Lab ID: 1207940-026

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Carbazole	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Chrysene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/31/2012 6:44:05 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Fluorene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Isophorone	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
1-Methylnaphthalene	4.4	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2-Methylnaphthalene	6.7	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Naphthalene	1.7	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM

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- B Analyte detected in the associated Method Blank
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Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:19:00 PM

Lab ID: 1207940-026

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/31/2012 6:44:05 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/31/2012 6:44:05 PM
Phenanthrene	2.8	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Phenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Pyrene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Pyridine	ND	2.5		mg/Kg	1	7/31/2012 6:44:05 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/31/2012 6:44:05 PM
Surr: 2,4,6-Tribromophenol	32.3	20.1-121		%REC	1	7/31/2012 6:44:05 PM
Surr: 2-Fluorobiphenyl	41.9	19-133		%REC	1	7/31/2012 6:44:05 PM
Surr: 2-Fluorophenol	0	20.2-108	S	%REC	1	7/31/2012 6:44:05 PM
Surr: 4-Terphenyl-d14	64.2	18.9-115		%REC	1	7/31/2012 6:44:05 PM
Surr: Nitrobenzene-d5	0	20.8-123	S	%REC	1	7/31/2012 6:44:05 PM
Surr: Phenol-d5	39.2	19.8-115		%REC	1	7/31/2012 6:44:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	2.8	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Toluene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Ethylbenzene	23	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Methyl tert-butyl ether (MTBE)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,4-Trimethylbenzene	44	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,3,5-Trimethylbenzene	16	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dichloroethane (EDC)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dibromoethane (EDB)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Naphthalene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1-Methylnaphthalene	ND	10		mg/Kg	50	7/24/2012 5:20:42 PM
2-Methylnaphthalene	ND	10		mg/Kg	50	7/24/2012 5:20:42 PM
Acetone	ND	38		mg/Kg	50	7/24/2012 5:20:42 PM
Bromobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Bromodichloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Bromoform	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Bromomethane	ND	7.5		mg/Kg	50	7/24/2012 5:20:42 PM
2-Butanone	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Carbon disulfide	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Carbon tetrachloride	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Chlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Chloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:19:00 PM

Lab ID: 1207940-026

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Chloromethane	ND	7.5		mg/Kg	50	7/24/2012 5:20:42 PM
2-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
4-Chlorotoluene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
cis-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
cis-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dibromo-3-chloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Dibromochloromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Dibromomethane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,3-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,4-Dichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Dichlorodifluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1-Dichloroethane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,1-Dichloroethene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,3-Dichloropropane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
2,2-Dichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,1-Dichloropropene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Hexachlorobutadiene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
2-Hexanone	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Isopropylbenzene	6.6	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
4-Isopropyltoluene	3.4	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
4-Methyl-2-pentanone	ND	25		mg/Kg	50	7/24/2012 5:20:42 PM
Methylene chloride	ND	7.5		mg/Kg	50	7/24/2012 5:20:42 PM
n-Butylbenzene	3.8	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
n-Propylbenzene	8.1	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
sec-Butylbenzene	3.8	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Styrene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
tert-Butylbenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,1,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,2,2-Tetrachloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Tetrachloroethene (PCE)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
trans-1,2-DCE	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
trans-1,3-Dichloropropene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,3-Trichlorobenzene	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,4-Trichlorobenzene	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,1-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,1,2-Trichloroethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Trichloroethene (TCE)	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Trichlorofluoromethane	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
1,2,3-Trichloropropane	ND	5.0		mg/Kg	50	7/24/2012 5:20:42 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-15 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:19:00 PM

Lab ID: 1207940-026

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	2.5		mg/Kg	50	7/24/2012 5:20:42 PM
Xylenes, Total	120	5.0		mg/Kg	50	7/24/2012 5:20:42 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	50	7/24/2012 5:20:42 PM
Surr: 4-Bromofluorobenzene	84.8	70-130		%REC	50	7/24/2012 5:20:42 PM
Surr: Dibromofluoromethane	113	70-130		%REC	50	7/24/2012 5:20:42 PM
Surr: Toluene-d8	107	70-130		%REC	50	7/24/2012 5:20:42 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-027

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/24/2012 9:49:16 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/24/2012 9:49:16 AM
Surr: DNOP	107	77.6-140		%REC	1	7/24/2012 9:49:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 6:37:37 PM
Surr: BFB	104	84-116		%REC	1	7/30/2012 6:37:37 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:23:17 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:31:38 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:31:38 PM
Barium	940	5.0		mg/Kg	50	8/8/2012 10:03:14 AM
Beryllium	ND	0.75		mg/Kg	5	8/5/2012 5:31:38 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:31:38 PM
Chromium	9.4	1.5		mg/Kg	5	8/5/2012 5:31:38 PM
Cobalt	5.2	3.0		mg/Kg	10	8/8/2012 11:34:09 AM
Iron	13000	500		mg/Kg	500	8/8/2012 10:05:39 AM
Lead	2.7	1.2		mg/Kg	5	8/5/2012 5:31:38 PM
Manganese	650	5.0		mg/Kg	50	8/8/2012 10:03:14 AM
Nickel	6.9	2.5		mg/Kg	5	8/5/2012 5:31:38 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:31:38 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:31:38 PM
Vanadium	21	12		mg/Kg	5	8/5/2012 5:31:38 PM
Zinc	17	12		mg/Kg	5	8/5/2012 5:31:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Aniline	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Azobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-027

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Carbazole	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Chrysene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/31/2012 7:14:38 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Fluorene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Isophorone	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Naphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-027

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/31/2012 7:14:38 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:14:38 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Phenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Pyridine	ND	1.0		mg/Kg	1	7/31/2012 7:14:38 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:14:38 PM
Surr: 2,4,6-Tribromophenol	75.9	20.1-121		%REC	1	7/31/2012 7:14:38 PM
Surr: 2-Fluorobiphenyl	64.3	19-133		%REC	1	7/31/2012 7:14:38 PM
Surr: 2-Fluorophenol	58.4	20.2-108		%REC	1	7/31/2012 7:14:38 PM
Surr: 4-Terphenyl-d14	85.2	18.9-115		%REC	1	7/31/2012 7:14:38 PM
Surr: Nitrobenzene-d5	61.7	20.8-123		%REC	1	7/31/2012 7:14:38 PM
Surr: Phenol-d5	63.1	19.8-115		%REC	1	7/31/2012 7:14:38 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Toluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Ethylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Xylenes, Total	ND	3.44		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Methyl tert-butyl ether (MTBE)	ND	2.30		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,4-Trimethylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,3,5-Trimethylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dichloroethane (EDC)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dibromoethane (EDB)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Naphthalene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1-Methylnaphthalene	ND	4.59		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Methylnaphthalene	ND	4.59		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Acetone	ND	34.4		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Bromobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Bromodichloromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Bromoform	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Butanone	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Carbon tetrachloride	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Chlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Chloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Chloroform	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-027

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Chlorotoluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Carbon disulfide	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
4-Chlorotoluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
cis-1,2-DCE	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
cis-1,3-Dichloropropene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dibromo-3-chloropropane	ND	2.30		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Dibromochloromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Dibromomethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,3-Dichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,4-Dichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Dichlorodifluoromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1-Dichloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1-Dichloroethene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2-Dichloropropane	ND	2.30		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,3-Dichloropropane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2,2-Dichloropropane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1-Dichloropropene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Hexachlorobutadiene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Isopropylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
4-Isopropyltoluene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Methylene chloride	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
n-Butylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
2-Hexanone	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
n-Propylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
sec-Butylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Styrene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
4-Methyl-2-pentanone	ND	5.74		µg/Kg-dry	1	7/27/2012 1:02:42 AM
tert-Butylbenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,1,2-Tetrachloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,2,2-Tetrachloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Tetrachloroethene (PCE)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
trans-1,2-DCE	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
trans-1,3-Dichloropropene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,3-Trichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,4-Trichlorobenzene	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,1-Trichloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,1,2-Trichloroethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Trichloroethene (TCE)	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Trichlorofluoromethane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
1,2,3-Trichloropropane	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-027

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	1.15		µg/Kg-dry	1	7/27/2012 1:02:42 AM
Surr: 1,2-Dichloroethane-d4	136	70-130	S	%REC	1	7/27/2012 1:02:42 AM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	7/27/2012 1:02:42 AM
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	7/27/2012 1:02:42 AM
Surr: Toluene-d8	92.9	70-130		%REC	1	7/27/2012 1:02:42 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-028

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/24/2012 10:36:19 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	7/24/2012 10:36:19 AM
Surr: DNOP	111	77.6-140		%REC	1	7/24/2012 10:36:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 7:06:26 PM
Surr: BFB	101	84-116		%REC	1	7/30/2012 7:06:26 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	8/2/2012 10:25:06 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:34:01 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:34:01 PM
Barium	890	5.0		mg/Kg	50	8/8/2012 10:08:22 AM
Beryllium	0.76	0.75		mg/Kg	5	8/5/2012 5:34:01 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:34:01 PM
Chromium	8.7	1.5		mg/Kg	5	8/5/2012 5:34:01 PM
Cobalt	7.0	1.5		mg/Kg	5	8/5/2012 5:34:01 PM
Iron	14000	500		mg/Kg	500	8/8/2012 10:10:49 AM
Lead	3.0	1.2		mg/Kg	5	8/5/2012 5:34:01 PM
Manganese	910	5.0		mg/Kg	50	8/8/2012 10:08:22 AM
Nickel	8.0	2.5		mg/Kg	5	8/5/2012 5:34:01 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:34:01 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:34:01 PM
Vanadium	24	12		mg/Kg	5	8/5/2012 5:34:01 PM
Zinc	22	12		mg/Kg	5	8/5/2012 5:34:01 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Acenaphthylene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Aniline	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Azobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Benzoic acid	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-028

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Carbazole	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Chrysene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Dibenzofuran	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	7/31/2012 7:45:05 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
Fluoranthene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Fluorene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Hexachloroethane	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Isophorone	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2-Methylphenol	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Naphthalene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM

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- E Value above quantitation range
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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-028

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
Nitrobenzene	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	7/31/2012 7:45:05 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	7/31/2012 7:45:05 PM
Phenanthrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Phenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Pyrene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Pyridine	ND	1.0		mg/Kg	1	7/31/2012 7:45:05 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	7/31/2012 7:45:05 PM
Surr: 2,4,6-Tribromophenol	47.4	20.1-121		%REC	1	7/31/2012 7:45:05 PM
Surr: 2-Fluorobiphenyl	45.2	19-133		%REC	1	7/31/2012 7:45:05 PM
Surr: 2-Fluorophenol	40.4	20.2-108		%REC	1	7/31/2012 7:45:05 PM
Surr: 4-Terphenyl-d14	53.2	18.9-115		%REC	1	7/31/2012 7:45:05 PM
Surr: Nitrobenzene-d5	46.0	20.8-123		%REC	1	7/31/2012 7:45:05 PM
Surr: Phenol-d5	43.6	19.8-115		%REC	1	7/31/2012 7:45:05 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Toluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Ethylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Xylenes, Total	ND	2.93		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Methyl tert-butyl ether (MTBE)	ND	1.96		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,4-Trimethylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,3,5-Trimethylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dichloroethane (EDC)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dibromoethane (EDB)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Naphthalene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1-Methylnaphthalene	ND	3.91		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Methylnaphthalene	ND	3.91		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Acetone	ND	29.3		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Bromobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Bromodichloromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Bromoform	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Butanone	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Carbon tetrachloride	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Chlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Chloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Chloroform	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-028

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Carbon disulfide	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
4-Chlorotoluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
cis-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
cis-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dibromo-3-chloropropane	ND	1.96		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Dibromochloromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Dibromomethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,3-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,4-Dichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Dichlorodifluoromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1-Dichloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1-Dichloroethene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2-Dichloropropane	ND	1.96		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,3-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2,2-Dichloropropane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Hexachlorobutadiene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Isopropylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
4-Isopropyltoluene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Methylene chloride	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
n-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
2-Hexanone	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
n-Propylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
sec-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Styrene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
4-Methyl-2-pentanone	ND	4.89		µg/Kg-dry	1	7/27/2012 1:30:26 AM
tert-Butylbenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,1,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,2,2-Tetrachloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Tetrachloroethene (PCE)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
trans-1,2-DCE	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
trans-1,3-Dichloropropene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,3-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,4-Trichlorobenzene	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,1-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,1,2-Trichloroethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Trichloroethene (TCE)	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Trichlorofluoromethane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
1,2,3-Trichloropropane	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-20 (0-0.5') DUP

Project: SWMU NO.14

Collection Date: 7/19/2012 5:50:00 PM

Lab ID: 1207940-028

Matrix: SOIL

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.978		µg/Kg-dry	1	7/27/2012 1:30:26 AM
Surr: 1,2-Dichloroethane-d4	127	70-130		%REC	1	7/27/2012 1:30:26 AM
Surr: 4-Bromofluorobenzene	91.7	70-130		%REC	1	7/27/2012 1:30:26 AM
Surr: Dibromofluoromethane	96.0	70-130		%REC	1	7/27/2012 1:30:26 AM
Surr: Toluene-d8	98.4	70-130		%REC	1	7/27/2012 1:30:26 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 GW

Project: SWMU NO.14

Collection Date: 7/19/2012 10:00:00 AM

Lab ID: 1207940-029

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	6.5	1.0		mg/L	1	7/23/2012 7:51:04 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 7:51:04 PM
Surr: DNOP	132	79.5-166		%REC	1	7/23/2012 7:51:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.2	0.25		mg/L	5	7/25/2012 1:33:25 PM
Surr: BFB	98.5	69.8-119		%REC	5	7/25/2012 1:33:25 PM
EPA METHOD 200.7: DISSOLVED METALS						Analyst: JLF
Barium	0.18	0.0020		mg/L	1	8/15/2012 11:54:12 AM
Beryllium	ND	0.0020		mg/L	1	8/10/2012 12:09:10 PM
Cadmium	ND	0.0020		mg/L	1	8/10/2012 12:09:10 PM
Chromium	0.0077	0.0060		mg/L	1	8/10/2012 12:09:10 PM
Cobalt	0.029	0.0060		mg/L	1	8/10/2012 12:09:10 PM
Iron	0.14	0.020		mg/L	1	8/10/2012 12:09:10 PM
Manganese	0.54	0.0020	*	mg/L	1	8/10/2012 12:09:10 PM
Nickel	0.18	0.010	*	mg/L	1	8/10/2012 12:09:10 PM
Silver	ND	0.0050		mg/L	1	8/10/2012 12:09:10 PM
Vanadium	ND	0.050		mg/L	1	8/10/2012 12:09:10 PM
Zinc	0.13	0.010		mg/L	1	8/10/2012 12:09:10 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	0.54	0.0020		mg/L	1	8/7/2012 10:07:08 AM
Beryllium	0.0021	0.0020		mg/L	1	8/7/2012 10:07:08 AM
Cadmium	ND	0.0020		mg/L	1	8/7/2012 10:07:08 AM
Chromium	0.075	0.0060		mg/L	1	8/7/2012 10:07:08 AM
Cobalt	0.038	0.0060		mg/L	1	8/7/2012 10:07:08 AM
Iron	31	1.0	*	mg/L	50	8/7/2012 4:33:49 PM
Manganese	1.3	0.020	*	mg/L	10	8/7/2012 10:12:15 AM
Nickel	0.20	0.010	*	mg/L	1	8/7/2012 10:07:08 AM
Silver	ND	0.0050		mg/L	1	8/7/2012 10:07:08 AM
Vanadium	ND	0.050		mg/L	1	8/7/2012 10:07:08 AM
Zinc	0.32	0.010		mg/L	1	8/7/2012 10:07:08 AM
EPA 200.8: DISSOLVED METALS						Analyst: SNV
Antimony	ND	0.0050		mg/L	5	7/26/2012 7:58:22 PM
Arsenic	0.011	0.0050	*	mg/L	5	7/26/2012 7:58:22 PM
Lead	ND	0.0050		mg/L	5	7/26/2012 7:58:22 PM
Selenium	0.023	0.0050		mg/L	5	7/26/2012 7:58:22 PM
EPA 200.8: METALS						Analyst: SNV
Antimony	ND	0.0025		mg/L	2.5	8/13/2012 5:44:15 PM
Arsenic	0.012	0.0025	*	mg/L	2.5	8/13/2012 5:44:15 PM
Lead	0.044	0.0025	*	mg/L	2.5	8/13/2012 5:44:15 PM

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 GW

Project: SWMU NO.14

Collection Date: 7/19/2012 10:00:00 AM

Lab ID: 1207940-029

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA 200.8: METALS						Analyst: SNV
Selenium	0.014	0.0025		mg/L	2.5	8/13/2012 5:44:15 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:11:41 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Aniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Anthracene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 1:45:30 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Carbazole	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Chrysene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Di-n-butyl phthalate	20	10		µg/L	1	7/25/2012 1:45:30 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dimethylphenol	27	10		µg/L	1	7/25/2012 1:45:30 PM

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1207940**

Date Reported: **8/21/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 GW

Project: SWMU NO.14

Collection Date: 7/19/2012 10:00:00 AM

Lab ID: 1207940-029

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Fluorene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Isophorone	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 1:45:30 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 1:45:30 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Phenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Pyrene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Pyridine	ND	10		µg/L	1	7/25/2012 1:45:30 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 1:45:30 PM
Surr: 2,4,6-Tribromophenol	69.8	44.2-126		%REC	1	7/25/2012 1:45:30 PM
Surr: 2-Fluorobiphenyl	66.1	37-114		%REC	1	7/25/2012 1:45:30 PM
Surr: 2-Fluorophenol	45.9	23.4-98		%REC	1	7/25/2012 1:45:30 PM
Surr: 4-Terphenyl-d14	77.8	41.3-116		%REC	1	7/25/2012 1:45:30 PM
Surr: Nitrobenzene-d5	59.6	39.5-118		%REC	1	7/25/2012 1:45:30 PM
Surr: Phenol-d5	42.2	20.9-95.9		%REC	1	7/25/2012 1:45:30 PM

EPA METHOD 8260B: VOLATILES

Analyst: DJF

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 GW

Project: SWMU NO.14

Collection Date: 7/19/2012 10:00:00 AM

Lab ID: 1207940-029

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	67	10		µg/L	10	7/27/2012 4:33:05 PM
Toluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Ethylbenzene	49	10		µg/L	10	7/27/2012 4:33:05 PM
Methyl tert-butyl ether (MTBE)	310	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,4-Trimethylbenzene	85	10		µg/L	10	7/27/2012 4:33:05 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Naphthalene	42	20		µg/L	10	7/27/2012 4:33:05 PM
1-Methylnaphthalene	61	40		µg/L	10	7/27/2012 4:33:05 PM
2-Methylnaphthalene	ND	40		µg/L	10	7/27/2012 4:33:05 PM
Acetone	420	100		µg/L	10	7/27/2012 4:33:05 PM
Bromobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Bromodichloromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Bromoform	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Bromomethane	ND	30		µg/L	10	7/27/2012 4:33:05 PM
2-Butanone	ND	100		µg/L	10	7/27/2012 4:33:05 PM
Carbon disulfide	ND	100		µg/L	10	7/27/2012 4:33:05 PM
Carbon Tetrachloride	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Chlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Chloroethane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Chloroform	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Chloromethane	ND	30		µg/L	10	7/27/2012 4:33:05 PM
2-Chlorotoluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
4-Chlorotoluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
cis-1,2-DCE	ND	10		µg/L	10	7/27/2012 4:33:05 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Dibromochloromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Dibromomethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Dichlorodifluoromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1-Dichloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1-Dichloroethene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2-Dichloropropane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,3-Dichloropropane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
2,2-Dichloropropane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
1,1-Dichloropropene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Hexachlorobutadiene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
2-Hexanone	ND	100		µg/L	10	7/27/2012 4:33:05 PM

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-2 GW

Project: SWMU NO.14

Collection Date: 7/19/2012 10:00:00 AM

Lab ID: 1207940-029

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Isopropylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
4-Isopropyltoluene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	7/27/2012 4:33:05 PM
Methylene Chloride	ND	30		µg/L	10	7/27/2012 4:33:05 PM
n-Butylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
n-Propylbenzene	10	10		µg/L	10	7/27/2012 4:33:05 PM
sec-Butylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Styrene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
tert-Butylbenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
trans-1,2-DCE	ND	10		µg/L	10	7/27/2012 4:33:05 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,1,2-Trichloroethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Trichloroethene (TCE)	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Trichlorofluoromethane	ND	10		µg/L	10	7/27/2012 4:33:05 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	7/27/2012 4:33:05 PM
Vinyl chloride	ND	10		µg/L	10	7/27/2012 4:33:05 PM
Xylenes, Total	45	15		µg/L	10	7/27/2012 4:33:05 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	10	7/27/2012 4:33:05 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	10	7/27/2012 4:33:05 PM
Surr: Dibromofluoromethane	101	70-130		%REC	10	7/27/2012 4:33:05 PM
Surr: Toluene-d8	104	70-130		%REC	10	7/27/2012 4:33:05 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:00:00 PM

Lab ID: 1207940-030

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 8:16:25 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 8:16:25 PM
Surr: DNOP	130	79.5-166		%REC	1	7/23/2012 8:16:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 2:08:44 AM
Surr: BFB	97.6	69.8-119		%REC	1	7/25/2012 2:08:44 AM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Beryllium	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Cadmium	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Chromium	ND	0.0060		mg/L	1	8/7/2012 9:45:25 AM
Cobalt	ND	0.0060		mg/L	1	8/7/2012 9:45:25 AM
Iron	ND	0.020		mg/L	1	8/7/2012 9:45:25 AM
Manganese	ND	0.0020		mg/L	1	8/7/2012 9:45:25 AM
Nickel	ND	0.010		mg/L	1	8/7/2012 9:45:25 AM
Silver	ND	0.0050		mg/L	1	8/7/2012 9:45:25 AM
Vanadium	ND	0.050		mg/L	1	8/7/2012 9:45:25 AM
Zinc	ND	0.010		mg/L	1	8/7/2012 9:45:25 AM
EPA 200.8: METALS						Analyst: SNV
Antimony	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
Arsenic	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
Lead	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
Selenium	ND	0.0010		mg/L	1	7/26/2012 8:06:14 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:13:29 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Aniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Anthracene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 2:15:34 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 2:15:34 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:00:00 PM

Lab ID: 1207940-030

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Carbazole	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Chrysene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Fluorene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Isophorone	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 2:15:34 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:00:00 PM

Lab ID: 1207940-030

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 2:15:34 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 2:15:34 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Phenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Pyrene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Pyridine	ND	10		µg/L	1	7/25/2012 2:15:34 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:15:34 PM
Surr: 2,4,6-Tribromophenol	98.6	44.2-126		%REC	1	7/25/2012 2:15:34 PM
Surr: 2-Fluorobiphenyl	78.3	37-114		%REC	1	7/25/2012 2:15:34 PM
Surr: 2-Fluorophenol	61.4	23.4-98		%REC	1	7/25/2012 2:15:34 PM
Surr: 4-Terphenyl-d14	93.0	41.3-116		%REC	1	7/25/2012 2:15:34 PM
Surr: Nitrobenzene-d5	74.3	39.5-118		%REC	1	7/25/2012 2:15:34 PM
Surr: Phenol-d5	45.8	20.9-95.9		%REC	1	7/25/2012 2:15:34 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:19:04 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:19:04 AM
Acetone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 2:19:04 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 2:19:04 AM

Qualifiers:

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:00:00 PM

Lab ID: 1207940-030

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 2:19:04 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 2:19:04 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 2:19:04 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:00:00 PM

Lab ID: 1207940-030

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 2:19:04 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 2:19:04 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 2:19:04 AM
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	1	7/25/2012 2:19:04 AM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	7/25/2012 2:19:04 AM
Surr: Dibromofluoromethane	100	70-130		%REC	1	7/25/2012 2:19:04 AM
Surr: Toluene-d8	105	70-130		%REC	1	7/25/2012 2:19:04 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:15:00 PM

Lab ID: 1207940-031

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/23/2012 8:41:47 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/23/2012 8:41:47 PM
Surr: DNOP	128	79.5-166		%REC	1	7/23/2012 8:41:47 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/25/2012 2:38:55 AM
Surr: BFB	88.8	69.8-119		%REC	1	7/25/2012 2:38:55 AM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	0.0062	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Beryllium	ND	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Cadmium	ND	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Chromium	ND	0.0060		mg/L	1	8/7/2012 9:52:35 AM
Cobalt	ND	0.0060		mg/L	1	8/7/2012 9:52:35 AM
Iron	0.14	0.020		mg/L	1	8/7/2012 9:52:35 AM
Manganese	ND	0.0020		mg/L	1	8/7/2012 9:52:35 AM
Nickel	ND	0.010		mg/L	1	8/7/2012 9:52:35 AM
Silver	ND	0.0050		mg/L	1	8/7/2012 9:52:35 AM
Vanadium	ND	0.050		mg/L	1	8/7/2012 9:52:35 AM
Zinc	ND	0.010		mg/L	1	8/7/2012 9:52:35 AM
EPA 200.8: METALS						Analyst: SNV
Antimony	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
Arsenic	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
Lead	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
Selenium	ND	0.0010		mg/L	1	7/26/2012 8:10:10 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	7/24/2012 10:15:18 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Aniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Anthracene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Azobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Benzoic acid	ND	20		µg/L	1	7/25/2012 2:45:43 PM
Benzyl alcohol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2012 2:45:43 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:15:00 PM

Lab ID: 1207940-031

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Carbazole	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Chrysene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dichlorophenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dinitrophenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Fluoranthene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Fluorene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Isophorone	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
3+4-Methylphenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	7/25/2012 2:45:43 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:15:00 PM

Lab ID: 1207940-031

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Naphthalene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
3-Nitroaniline	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Nitroaniline	ND	20		µg/L	1	7/25/2012 2:45:43 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
4-Nitrophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Pentachlorophenol	ND	20		µg/L	1	7/25/2012 2:45:43 PM
Phenanthrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Phenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Pyrene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Pyridine	ND	10		µg/L	1	7/25/2012 2:45:43 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2012 2:45:43 PM
Surr: 2,4,6-Tribromophenol	61.9	44.2-126		%REC	1	7/25/2012 2:45:43 PM
Surr: 2-Fluorobiphenyl	84.9	37-114		%REC	1	7/25/2012 2:45:43 PM
Surr: 2-Fluorophenol	44.2	23.4-98		%REC	1	7/25/2012 2:45:43 PM
Surr: 4-Terphenyl-d14	81.7	41.3-116		%REC	1	7/25/2012 2:45:43 PM
Surr: Nitrobenzene-d5	85.3	39.5-118		%REC	1	7/25/2012 2:45:43 PM
Surr: Phenol-d5	44.5	20.9-95.9		%REC	1	7/25/2012 2:45:43 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:47:19 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 2:47:19 AM
Acetone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 2:47:19 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 2:47:19 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:15:00 PM

Lab ID: 1207940-031

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 2:47:19 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 2:47:19 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 2:47:19 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB071912

Project: SWMU NO.14

Collection Date: 7/19/2012 6:15:00 PM

Lab ID: 1207940-031

Matrix: AQUEOUS

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 2:47:19 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 2:47:19 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 2:47:19 AM
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	1	7/25/2012 2:47:19 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	7/25/2012 2:47:19 AM
Surr: Dibromofluoromethane	102	70-130		%REC	1	7/25/2012 2:47:19 AM
Surr: Toluene-d8	106	70-130		%REC	1	7/25/2012 2:47:19 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207940-032

Matrix: TRIP BLANK

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Toluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Ethylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Naphthalene	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 3:15:33 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/25/2012 3:15:33 AM
Acetone	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Bromobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Bromodichloromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Bromoform	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Bromomethane	ND	3.0		µg/L	1	7/25/2012 3:15:33 AM
2-Butanone	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Carbon disulfide	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Chlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Chloroethane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Chloroform	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Chloromethane	ND	3.0		µg/L	1	7/25/2012 3:15:33 AM
2-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
4-Chlorotoluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
cis-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Dibromochloromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Dibromomethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
2-Hexanone	ND	10		µg/L	1	7/25/2012 3:15:33 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207940-032

Matrix: TRIP BLANK

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Isopropylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/25/2012 3:15:33 AM
Methylene Chloride	ND	3.0		µg/L	1	7/25/2012 3:15:33 AM
n-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
n-Propylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
sec-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Styrene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
tert-Butylbenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
trans-1,2-DCE	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/25/2012 3:15:33 AM
Vinyl chloride	ND	1.0		µg/L	1	7/25/2012 3:15:33 AM
Xylenes, Total	ND	1.5		µg/L	1	7/25/2012 3:15:33 AM
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%REC	1	7/25/2012 3:15:33 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	7/25/2012 3:15:33 AM
Surr: Dibromofluoromethane	105	70-130		%REC	1	7/25/2012 3:15:33 AM
Surr: Toluene-d8	104	70-130		%REC	1	7/25/2012 3:15:33 AM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MEOH BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207940-033

Matrix: MEOH BLAN

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/30/2012 7:35:12 PM
Surr: BFB	99.3	84-116		%REC	1	7/30/2012 7:35:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Toluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Naphthalene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:43:17 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:43:17 PM
Acetone	ND	0.75		mg/Kg	1	7/30/2012 4:43:17 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Bromoform	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Bromomethane	ND	0.15		mg/Kg	1	7/30/2012 4:43:17 PM
2-Butanone	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Chloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Chloroform	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Chloromethane	ND	0.15		mg/Kg	1	7/30/2012 4:43:17 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MEOH BLANK

Project: SWMU NO.14

Collection Date:

Lab ID: 1207940-033

Matrix: MEOH BLAN

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/30/2012 4:43:17 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/30/2012 4:43:17 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Styrene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Vinyl chloride	ND	0.050		mg/Kg	1	7/30/2012 4:43:17 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/30/2012 4:43:17 PM
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	7/30/2012 4:43:17 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/30/2012 4:43:17 PM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	7/30/2012 4:43:17 PM
Surr: Toluene-d8	104	70-130		%REC	1	7/30/2012 4:43:17 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.14

Collection Date:

Lab ID: 1207940-034

Matrix: MEOH BLAN

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2012 2:26:44 AM
Surr: BFB	98.7	84-116		%REC	1	8/2/2012 2:26:44 AM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Toluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Naphthalene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:14:49 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/30/2012 4:14:49 PM
Acetone	ND	0.75		mg/Kg	1	7/30/2012 4:14:49 PM
Bromobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Bromoform	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Bromomethane	ND	0.15		mg/Kg	1	7/30/2012 4:14:49 PM
2-Butanone	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Carbon disulfide	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Chlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Chloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Chloroform	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Chloromethane	ND	0.15		mg/Kg	1	7/30/2012 4:14:49 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Dibromomethane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207940

Date Reported: 8/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.14

Collection Date:

Lab ID: 1207940-034

Matrix: MEOH BLAN

Received Date: 7/20/2012 2:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
2,2-Dichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
2-Hexanone	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	7/30/2012 4:14:49 PM
Methylene chloride	ND	0.15		mg/Kg	1	7/30/2012 4:14:49 PM
n-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Styrene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Vinyl chloride	ND	0.050		mg/Kg	1	7/30/2012 4:14:49 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/30/2012 4:14:49 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	7/30/2012 4:14:49 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/30/2012 4:14:49 PM
Surr: Dibromofluoromethane	92.1	70-130		%REC	1	7/30/2012 4:14:49 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	7/30/2012 4:14:49 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit
U Samples with CalcVal < MDL

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 #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number	120725001-001	Sampling Date	7/19/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207940-001D / SWMU 14-10 (0-0.5)			Sampling Time	11:00 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-002	Sampling Date	7/19/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207940-002D / SWMU 14-10 (1.5-2.0)			Sampling Time	11:05 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-003	Sampling Date	7/19/2012	Date/Time Received	7/24/2012	12:50 PM	
Client Sample ID	1207940-003D / SWMU 14-8 (0-0.5)			Sampling Time	11:27 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C595; MT:Cert0095

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 #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-004	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-004D / SWMU 14-8 (1.5-2.0)			Sampling Time	11:40 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-005	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-005D / SWMU 14-8 (1.5-2.0) DUP			Sampling Time	11:40 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-006	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-006D / SWMU 14-12 (0-0.5)			Sampling Time	12:05 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

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 #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-007	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-007D / SWMU 14-12 (1.5-2.0)			Sampling Time	12:12 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-008	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-008D / SWMU 14-13 (0-0.5)			Sampling Time	12:36 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-009	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-009D / SWMU 14-13 (1.5-2.0)			Sampling Time	12:45 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

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

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number	120725001-010	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-010D / SWMU 14-14 (0-0.5)			Sampling Time	1:07 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-011	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-011D / SWMU 14-14 (1.5-2.0)			Sampling Time	1:12 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-012	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-012D / SWMU 14-11 (0-0.5)			Sampling Time	1:33 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	7/31/2012	CRW	EPA 335.4	

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Attn: ANDY FREEMAN

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number	120725001-013	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-013D / SWMU 14-11 (1.5-2.0)			Sampling Time	1:38 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-014	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-014D / SWMU 14-18 (0-0.5)			Sampling Time	2:08 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.22	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-015	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-015D / SWMU 14-18 (1.5-2.0)			Sampling Time	2:15 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.50	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-016	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-016D / SWMU 14-5 (0-0.5)			Sampling Time	3:00 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.600	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-017	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-017D / SWMU 14-5 (0-0.5) DUP			Sampling Time	3:00 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-018	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-018D / SWMU 14-5 (1.5-2.0)			Sampling Time	3:06 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

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

Batch #: 120725001
Project Name: 1207940

Analytical Results Report

Sample Number	120725001-019	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-019D / SWMU 14-19 (0-0.5)			Sampling Time	3:26 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-020	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-020D / SWMU 14-19 (1.5-2.0)			Sampling Time	3:33 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-021	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-021D / SWMU 14-17 (0-0.5)			Sampling Time	4:11 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.33	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-022	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-022D / SWMU 14-17 (1.5-2.0)	Sampling Time	4:18 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-023	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-023D / SWMU 14-16 (0-0.5)	Sampling Time	4:45 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-024	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-024D / SWMU 14-16 (1.5-2.0)	Sampling Time	4:51 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-025	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-025D / SWMU 14-15 (0-0.5)			Sampling Time	5:14 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-026	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-026D / SWMU 14-15 (1.5-2.0)			Sampling Time	5:19 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-027	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-027D / SWMU 14-20 (0-0.5)			Sampling Time	5:50 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

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Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-028	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-028D / SWMU 14-20 (0-0.5) DUP			Sampling Time	5:50 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.5	8/1/2012	JTT	EPA 335.4	

Sample Number	120725001-029	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-029F / SWMU 14-2 GW			Sampling Time	10:00 AM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.216	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Sample Number	120725001-030	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-030F / FB071912			Sampling Time	6:00 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	8/1/2012	JTT	EPA 335.4	

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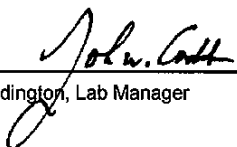
Client: HALL ENVIRONMENTAL ANALYSIS LAB **Batch #:** 120725001
Address: 4901 HAWKINS NE SUITE D **Project Name:** 1207940
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Analytical Results Report

Sample Number	120725001-031	Sampling Date	7/19/2012	Date/Time Received	7/24/2012 12:50 PM
Client Sample ID	1207940-031F / EB071912			Sampling Time	6:15 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	7/31/2012	CRW	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2992		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	2992		RunNo:	4442			
Prep Date:	7/24/2012		Analysis Date:	7/26/2012		SeqNo:	124085	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Manganese	ND	0.0020								
Zinc	ND	0.010								

Sample ID	LCS-2992		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	2992		RunNo:	4442			
Prep Date:	7/24/2012		Analysis Date:	7/26/2012		SeqNo:	124086	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.6	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	97.3	85	115			
Manganese	0.49	0.0020	0.5000	0	97.3	85	115			
Zinc	0.48	0.010	0.5000	0	95.8	85	115			

Sample ID	MB-2992		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	2992		RunNo:	4694			
Prep Date:	7/24/2012		Analysis Date:	8/7/2012		SeqNo:	131946	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LCS-2992		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	2992		RunNo:	4694			
Prep Date:	7/24/2012		Analysis Date:	8/7/2012		SeqNo:	131947	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Beryllium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.9	85	115			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-2992		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: 2992		RunNo: 4694					
Prep Date:	7/24/2012		Analysis Date: 8/7/2012		SeqNo: 131947		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.4	85	115			
Iron	0.49	0.020	0.5000	0	98.4	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			
Nickel	0.47	0.010	0.5000	0	93.7	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			
Zinc	0.47	0.010	0.5000	0	93.9	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R4694			RunNo: 4694					
Prep Date:		Analysis Date: 8/7/2012			SeqNo: 131952		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LCS	SampType: LCS			TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW	Batch ID: R4694			RunNo: 4694					
Prep Date:		Analysis Date: 8/7/2012			SeqNo: 131953		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.9	85	115			
Beryllium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.50	0.0020	0.5000	0.0005300	99.7	85	115			
Chromium	0.49	0.0060	0.5000	0	98.4	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.49	0.020	0.5000	0	97.3	85	115			
Manganese	0.49	0.0020	0.5000	0	97.1	85	115			
Nickel	0.46	0.010	0.5000	0.001850	92.5	85	115			
Silver	0.10	0.0050	0.1000	0	100	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			
Zinc	0.47	0.010	0.5000	0	93.2	85	115			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207605-004AMS		SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	R4694		RunNo:	4694			
Prep Date:			Analysis Date:	8/7/2012		SeqNo:	131960		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.63	0.0020	0.5000	0.09631	106	70	130			
Beryllium	0.55	0.0020	0.5000	0	110	70	130			
Cadmium	0.55	0.0020	0.5000	0	110	70	130			
Chromium	0.53	0.0060	0.5000	0	105	70	130			
Nickel	0.49	0.010	0.5000	0	97.7	70	130			
Zinc	0.51	0.010	0.5000	0.006940	100	70	130			

Sample ID	1207605-004AMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	R4694		RunNo:	4694			
Prep Date:			Analysis Date:	8/7/2012		SeqNo:	131961		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.61	0.0020	0.5000	0.09631	103	70	130	2.89	20	
Beryllium	0.53	0.0020	0.5000	0	105	70	130	4.73	20	
Cadmium	0.53	0.0020	0.5000	0	106	70	130	4.00	20	
Chromium	0.51	0.0060	0.5000	0	102	70	130	2.90	20	
Nickel	0.48	0.010	0.5000	0	95.1	70	130	2.65	20	
Zinc	0.50	0.010	0.5000	0.006940	97.9	70	130	2.60	20	

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R4878		RunNo:	4878			
Prep Date:			Analysis Date:	8/15/2012		SeqNo:	137839		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	R4878		RunNo:	4878			
Prep Date:			Analysis Date:	8/15/2012		SeqNo:	137840		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	PBW		Batch ID:	R4793		RunNo:	4793			
Prep Date:			Analysis Date:	8/10/2012		SeqNo:	135124	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	LCSW		Batch ID:	R4793		RunNo:	4793			
Prep Date:			Analysis Date:	8/10/2012		SeqNo:	135125	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	0.52	0.0020	0.5000	0	103	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.5	85	115			
Chromium	0.50	0.0060	0.5000	0.001100	99.1	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.5	85	115			
Iron	0.49	0.020	0.5000	0.006750	97.3	85	115			
Manganese	0.49	0.0020	0.5000	0	97.8	85	115			
Nickel	0.47	0.010	0.5000	0	94.1	85	115			
Silver	0.10	0.0050	0.1000	0	99.8	85	115			
Vanadium	0.52	0.050	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0.002400	97.3	85	115			

Sample ID	1206C11-001IMS		SampType:	MS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	BatchQC		Batch ID:	R4793		RunNo:	4793			
Prep Date:			Analysis Date:	8/10/2012		SeqNo:	135154	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.003510	99.1	70	130			

Sample ID	1206C11-001IMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	BatchQC		Batch ID:	R4793		RunNo:	4793			
Prep Date:			Analysis Date:	8/10/2012		SeqNo:	135155	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0.003510	97.9	70	130	1.15	20	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID:	R4878	RunNo:	4878					
Prep Date:		Analysis Date:	8/15/2012	SeqNo:	137837	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW	Batch ID:	R4878	RunNo:	4878					
Prep Date:		Analysis Date:	8/15/2012	SeqNo:	137838	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.9	85	115			

Sample ID	1207385-012AMS	SampType:	MS	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC	Batch ID:	R4878	RunNo:	4878					
Prep Date:		Analysis Date:	8/15/2012	SeqNo:	137908	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.02608	103	70	130			

Sample ID	1207385-012AMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC	Batch ID:	R4878	RunNo:	4878					
Prep Date:		Analysis Date:	8/15/2012	SeqNo:	137909	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.54	0.0020	0.5000	0.02608	102	70	130	0.846	20	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4467		RunNo: 4467					
Prep Date:			Analysis Date: 7/26/2012		SeqNo: 124866		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.9	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	98.1	85	115			
Selenium	0.028	0.0010	0.02500	0	110	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124867		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	1207221-005AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R4467		RunNo: 4467					
Prep Date:			Analysis Date: 7/26/2012		SeqNo: 124875		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.025	0.0010	0.02500	0.0004564	98.5	70	130			

Sample ID	1207238-010AMS			SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC			Batch ID:	R4467		RunNo:	4467			
Prep Date:				Analysis Date:	7/26/2012		SeqNo:	124890	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Lead	0.025	0.0010	0.02500	0.0005791	96.5	70	130				

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R4467		RunNo: 4467					
Prep Date:			Analysis Date: 7/26/2012		SeqNo: 124891		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.024	0.0010	0.02500	0	95.5	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124892		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2992		SampType: MBLK		TestCode: EPA 200.8: Metals					
Client ID:	PBW		Batch ID: 2992		RunNo: 4529					
Prep Date:	7/24/2012		Analysis Date: 7/30/2012		SeqNo: 127013		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								

Sample ID	MB-2992		SampType: MBLK		TestCode: EPA 200.8: Metals					
Client ID:	PBW		Batch ID: 2992		RunNo: 4564					
Prep Date:	7/24/2012		Analysis Date: 7/31/2012		SeqNo: 128124		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0025								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207285-002AMS		SampType: MS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	BatchQC		Batch ID: R4467		RunNo: 4467					
Prep Date:			Analysis Date: 7/26/2012		SeqNo: 124796		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0.0004413	99.7	70	130			
Selenium	0.034	0.0010	0.02500	0.008055	106	70	130			

Sample ID	LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124807		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.028	0.0010	0.02500	0	111	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124809		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	1207385-012AMS	SampType: MS			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	BatchQC	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124832		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0.0005215	101	70	130			
Lead	0.024	0.0010	0.02500	0	97.4	70	130			
Selenium	0.026	0.0010	0.02500	0	103	70	130			

Sample ID	LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124858		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.9	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.025	0.0010	0.02500	0	98.1	85	115			
Selenium	0.028	0.0010	0.02500	0	110	85	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: R4467		RunNo: 4467					
Prep Date:			Analysis Date: 7/26/2012		SeqNo: 124859		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.024	0.0010	0.02500	0	95.5	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124861		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: R4467			RunNo: 4467					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 124862		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2979		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 2979		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122185		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-2979		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 2979		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122186		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.7	80	120			

Sample ID	1207546-001BMS		SampType: MS		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 2979		RunNo: 4384					
Prep Date:	7/23/2012		Analysis Date: 7/24/2012		SeqNo: 122188		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	84.4	75	125			

Sample ID	1207546-001BMSD			SampType:	MSD		TestCode:	EPA Method 245.1: Mercury			
Client ID:	BatchQC			Batch ID:	2979		RunNo:	4384			
Prep Date:	7/23/2012			Analysis Date:	7/24/2012		SeqNo:	122191		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0040	0.00020	0.005000	0	79.7	75	125	5.66	20		

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2946	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2946			RunNo: 4221					
Prep Date:	7/21/2012	Analysis Date: 7/22/2012			SeqNo: 120621		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	77.6	140			

Sample ID	MB-2947	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 2947			RunNo: 4221					
Prep Date:	7/21/2012	Analysis Date: 7/22/2012			SeqNo: 120622		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		111	77.6	140			

Sample ID	LCS-2946		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2946		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120623		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	76.3	52.6	130			
Surr: DNOP	4.5		5.000		90.5	77.6	140			

Sample ID	LCS-2947		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2947		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120624		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.6	52.6	130			
Surr: DNOP	4.4		5.000		87.1	77.6	140			

Sample ID	1207838-001AMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 2946			RunNo: 4221					
Prep Date:	7/21/2012	Analysis Date: 7/22/2012			SeqNo: 120626		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.7	48.73	0	78.1	57.2	146			
Surr: DNOP	4.4		4.873		89.6	77.6	140			

Sample ID	1207838-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 2946		RunNo: 4221					
Prep Date:	7/21/2012		Analysis Date: 7/22/2012		SeqNo: 120627		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207838-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	2946	RunNo:	4221					
Prep Date:	7/21/2012	Analysis Date:	7/22/2012	SeqNo:	120627	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.9	49.55	0	71.7	57.2	146	6.92	24.5	
Surr: DNOP	4.4		4.955		88.1	77.6	140	0	0	

Sample ID	MB-2983	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	2983	RunNo:	4371					
Prep Date:	7/23/2012	Analysis Date:	7/24/2012	SeqNo:	121772	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		105	77.6	140			

Sample ID	LCS-2983	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	2983	RunNo:	4371					
Prep Date:	7/23/2012	Analysis Date:	7/24/2012	SeqNo:	121845	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.5	52.6	130			
Surr: DNOP	4.0		5.000		79.7	77.6	140			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2965	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW	Batch ID: 2965			RunNo: 4229					
Prep Date:	7/23/2012	Analysis Date: 7/23/2012			SeqNo: 121391		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		123	79.5	166			

Sample ID	LCS-2965		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 2965		RunNo: 4229					
Prep Date:	7/23/2012		Analysis Date: 7/23/2012		SeqNo: 121392		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.0	74	157			
Surr: DNOP	0.51		0.5000		102	79.5	166			

Sample ID	LCSD-2965		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 2965		RunNo: 4229					
Prep Date:	7/23/2012		Analysis Date: 7/23/2012		SeqNo: 121393		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.9	74	157	0.931	23	
Surr: DNOP	0.53		0.5000		106	79.5	166	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3010	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID: 3010			RunNo: 4444					
Prep Date:	7/24/2012	Analysis Date: 7/26/2012			SeqNo: 124694		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		99.6	84	116			

Sample ID	LCS-3010		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124695		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	85	115			
Surr: BFB	1100		1000		108	84	116			

Sample ID	1207A15-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124697		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.61	3.490	84.9	70	130			
Surr: BFB	1100		944.3		112	84	116			

Sample ID	1207A15-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 3010		RunNo: 4444					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124698		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.58	3.490	83.3	70	130	1.63	22.1	
Surr: BFB	1100		943.4		113	84	116	0	0	

Sample ID	MB-3054		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 3054		RunNo: 4572					
Prep Date:	7/26/2012		Analysis Date: 7/30/2012		SeqNo: 128276		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		98.8	84	116			

Sample ID	LCS-3054		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 3054		RunNo: 4572					
Prep Date:	7/26/2012		Analysis Date: 7/30/2012		SeqNo: 128277		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.5	85	115			
Surr: BFB	1000		1000		102	84	116			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207B18-001AMS	SampType: MS			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID: 3054			RunNo: 4572					
Prep Date:	7/26/2012	Analysis Date: 7/30/2012			SeqNo: 128295		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	41	4.9	24.58	20.18	85.5	70	130			
Surr: BFB	1100		983.3		110	84	116			

Sample ID	1207B18-001AMSD	SampType: MSD			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID: 3054			RunNo: 4572					
Prep Date:	7/26/2012	Analysis Date: 7/31/2012			SeqNo: 128296		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	43	4.9	24.44	20.18	91.6	70	130	3.25	22.1	
Surr: BFB	1100		977.5		111	84	116	0	0	

Sample ID	MB-3071	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID: 3071			RunNo: 4513					
Prep Date:	7/27/2012	Analysis Date: 7/30/2012			SeqNo: 128374		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	1200		1000		121	84	116			S

Sample ID	LCS-3071	SampType: LCS			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID: 3071			RunNo: 4513					
Prep Date:	7/27/2012	Analysis Date: 7/30/2012			SeqNo: 128375		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	93.0	85	115			
Surr: BFB	1000		1000		102	84	116			

Sample ID	1207C50-001A MS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3071	RunNo:	4513					
Prep Date:		Analysis Date:	7/30/2012	SeqNo:	128377	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	2.487	91.3	70	130			
Surr: BFB	900		1000		90.5	84	116			

Sample ID	1207C50-001A MSD		SampType:	MSD		TestCode:	EPA Method 8015B: Gasoline Range				
Client ID:	BatchQC		Batch ID:	3071		RunNo:	4513				
Prep Date:			Analysis Date:	7/30/2012		SeqNo:	128378		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	26	5.0	25.00	2.487	92.2	70	130	0.826	22.1		
Surr: BFB	1100		1000		114	84	116	0	0		

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207B91-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3071	RunNo:	4576					
Prep Date:	7/27/2012	Analysis Date:	8/1/2012	SeqNo:	128410	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	12	24.20	0	74.6	70	130			
Surr: BFB	5500		4840		115	84	116			

Sample ID	1207B91-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3071	RunNo:	4576					
Prep Date:	7/27/2012	Analysis Date:	8/1/2012	SeqNo:	128411	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	11	22.83	0	78.8	70	130	0.351	22.1	
Surr: BFB	4700		4566		103	84	116	0	0	

Sample ID	MB-3118	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	3118	RunNo:	4574					
Prep Date:	7/31/2012	Analysis Date:	8/1/2012	SeqNo:	129323	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	980		1000		98.4	84	116			

Sample ID	LCS-3118	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	3118	RunNo:	4574					
Prep Date:	7/31/2012	Analysis Date:	8/1/2012	SeqNo:	129324	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	93.6	85	115			
Surr: BFB	1000		1000		101	84	116			

Sample ID	1207D19-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3118	RunNo:	4574					
Prep Date:	7/31/2012	Analysis Date:	8/1/2012	SeqNo:	129332	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	37	4.7	23.74	14.95	93.6	70	130			
Surr: BFB	1500		949.7		160	84	116			S

Sample ID	1207D19-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	3118	RunNo:	4574					
Prep Date:	7/31/2012	Analysis Date:	8/1/2012	SeqNo:	129333	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	37	4.8	24.15	14.95	91.3	70	130	0.497	22.1	
Surr: BFB	1600		966.2		167	84	116	0	0	S

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID:	R4409	RunNo:	4409					
Prep Date:		Analysis Date:	7/24/2012	SeqNo:	122827	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		88.5	69.8	119			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID:	R4409	RunNo:	4409					
Prep Date:		Analysis Date:	7/24/2012	SeqNo:	122828	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	101	75.9	119			
Surr: BFB	21		20.00		103	69.8	119			

Sample ID	1207819-004AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R4409	RunNo:	4409					
Prep Date:		Analysis Date:	7/24/2012	SeqNo:	122835	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.7	0.25	2.500	2.307	94.7	75.4	121			
Surr: BFB	100		100.0		103	69.8	119			

Sample ID	1207819-004AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R4409	RunNo:	4409					
Prep Date:		Analysis Date:	7/24/2012	SeqNo:	122836	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.1	0.25	2.500	2.307	71.5	75.4	121	13.2	10.5	SR
Surr: BFB	96		100.0		96.5	69.8	119	0	0	

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID:	R4435	RunNo:	4435					
Prep Date:		Analysis Date:	7/25/2012	SeqNo:	123768	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.4	69.8	119			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID:	R4435	RunNo:	4435					
Prep Date:		Analysis Date:	7/25/2012	SeqNo:	123769	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.0	75.9	119			
Surr: BFB	18		20.00		90.7	69.8	119			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b5	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4233	RunNo:	4233					
Prep Date:		Analysis Date:	7/21/2012	SeqNo:	121267	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								
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b5	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121267		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.050								
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: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID 100ng lcs2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSS	Batch ID: R4233			RunNo: 4233						
Prep Date:	Analysis Date: 7/21/2012			SeqNo: 121268		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	107	70.7	123			
Toluene	1.1	0.050	1.000	0	107	80	120			
Chlorobenzene	1.0	0.050	1.000	0	102	70	130			
1,1-Dichloroethene	0.99	0.050	1.000	0	99.0	63.1	148			
Trichloroethene (TCE)	0.89	0.050	1.000	0	88.8	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.60		0.5000		121	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs2		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121268	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		89.3	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID	1207900-002b ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121269	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.050	0.6439	0.006767	108	81.3	119			
Toluene	0.65	0.050	0.6439	0	100	75	121			
Chlorobenzene	0.64	0.050	0.6439	0	99.6	78.5	120			
1,1-Dichloroethene	0.68	0.050	0.6439	0	106	75.3	115			
Trichloroethene (TCE)	0.61	0.050	0.6439	0	94.7	67.8	119			
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		97.6	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.3220		97.9	70	130			
Surr: Dibromofluoromethane	0.32		0.3220		98.8	70	130			
Surr: Toluene-d8	0.32		0.3220		101	70	130			

Sample ID	1207900-002b msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4233		RunNo:	4233			
Prep Date:			Analysis Date:	7/21/2012		SeqNo:	121270	Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.67	0.050	0.6439	0.006767	103	81.3	119	4.25	15.7	
Toluene	0.63	0.050	0.6439	0	98.3	75	121	2.14	16.2	
Chlorobenzene	0.65	0.050	0.6439	0	101	78.5	120	1.27	14.9	
1,1-Dichloroethene	0.60	0.050	0.6439	0	93.7	75.3	115	12.0	31.8	
Trichloroethene (TCE)	0.55	0.050	0.6439	0	85.7	67.8	119	10.0	16.5	
Surr: 1,2-Dichloroethane-d4	0.31		0.3220		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.3220		97.7	70	130	0	0	
Surr: Dibromofluoromethane	0.30		0.3220		92.3	70	130	0	0	
Surr: Toluene-d8	0.32		0.3220		100	70	130	0	0	

Sample ID	5ml-rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	R4379		RunNo:	4379			
Prep Date:			Analysis Date:	7/23/2012		SeqNo:	122014	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								
Methyl tert-butyl ether (MTBE)	ND	0.050								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.050								
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: 1,2-Dichloroethane-d4	0.47		0.5000		93.6	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID:	R4379	RunNo:	4379					
Prep Date:		Analysis Date:	7/23/2012	SeqNo:	122015	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	105	70.7	123			
Toluene	0.96	0.050	1.000	0	95.5	80	120			
Chlorobenzene	0.98	0.050	1.000	0	97.9	70	130			
1,1-Dichloroethene	0.93	0.050	1.000	0	92.5	63.1	148			
Trichloroethene (TCE)	0.88	0.050	1.000	0	88.4	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207940-007b ms		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	SWMU 14-12 (1.5-2.		Batch ID: R4379		RunNo: 4379					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122016		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	44	2.5	42.92	2.856	95.9	81.3	119			
Toluene	56	2.5	42.92	14.08	97.1	75	121			
Chlorobenzene	42	2.5	42.92	0	97.1	78.5	120			
1,1-Dichloroethene	39	2.5	42.92	0	91.6	75.3	115			
Trichloroethene (TCE)	37	2.5	42.92	0	85.1	67.8	119			
Surr: 1,2-Dichloroethane-d4	20		21.46		92.0	70	130			
Surr: 4-Bromofluorobenzene	20		21.46		93.8	70	130			
Surr: Dibromofluoromethane	22		21.46		101	70	130			
Surr: Toluene-d8	22		21.46		102	70	130			

Sample ID	1207940-007b msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	SWMU 14-12 (1.5-2.		Batch ID: R4379		RunNo: 4379					
Prep Date:			Analysis Date: 7/24/2012		SeqNo: 122017		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.5	42.92	2.856	93.9	81.3	119	1.96	15.7	
Toluene	54	2.5	42.92	14.08	92.6	75	121	3.49	16.2	
Chlorobenzene	42	2.5	42.92	0	97.0	78.5	120	0.0484	14.9	
1,1-Dichloroethene	37	2.5	42.92	0	85.4	75.3	115	7.02	31.8	
Trichloroethene (TCE)	36	2.5	42.92	0	84.2	67.8	119	1.08	16.5	
Surr: 1,2-Dichloroethane-d4	20		21.46		94.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	20		21.46		92.2	70	130	0	0	
Surr: Dibromofluoromethane	23		21.46		106	70	130	0	0	
Surr: Toluene-d8	21		21.46		99.9	70	130	0	0	

Sample ID	mb-3010		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS		Batch ID: 3010		RunNo: 4468					
Prep Date:	7/24/2012		Analysis Date: 7/25/2012		SeqNo: 125366		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Sample ID	lcs-3010		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 3010		RunNo: 4468					
Prep Date:	7/24/2012		Analysis Date: 7/25/2012		SeqNo: 125367		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-3010		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	3010		RunNo:	4468			
Prep Date:	7/24/2012		Analysis Date:	7/25/2012		SeqNo:	125367		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID	mb-3010		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	3010		RunNo:	4498			
Prep Date:	7/24/2012		Analysis Date:	7/27/2012		SeqNo:	126123		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.7	70	130			
Surr: 4-Bromofluorobenzene	0.59		0.5000		118	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		99.3	70	130			

Sample ID	5ml rb		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	R4537		RunNo:	4537			
Prep Date:			Analysis Date:	7/30/2012		SeqNo:	127461		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								
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	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID: R4537			RunNo: 4537					
Prep Date:		Analysis Date: 7/30/2012			SeqNo: 127461		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	0.10								
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	0.10								
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	0.050								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID: R4537			RunNo: 4537					
Prep Date:		Analysis Date: 7/30/2012			SeqNo: 127461		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.6	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		89.0	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID: R4537			RunNo: 4537					
Prep Date:	Analysis Date: 7/30/2012			SeqNo: 127466			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0	91.1	70.7	123			
Toluene	0.98	0.050	1.000	0	98.4	80	120			
Chlorobenzene	0.99	0.050	1.000	0	99.3	70	130			
1,1-Dichloroethene	0.83	0.050	1.000	0	83.3	63.1	148			
Trichloroethene (TCE)	0.79	0.050	1.000	0	79.3	63.2	114			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.3	70	130			
Surr: 4-Bromofluorobenzene	0.56		0.5000		112	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.9	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Sample ID	mb-3118	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID: 3118			RunNo: 4594					
Prep Date:	7/31/2012	Analysis Date: 8/1/2012			SeqNo: 129277			Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		77.6	70	130			
Surr: 4-Bromofluorobenzene	0.37		0.5000		73.3	70	130			
Surr: Dibromofluoromethane	0.37		0.5000		73.3	70	130			
Surr: Toluene-d8	0.40		0.5000		80.6	70	130			

Sample ID	lcs-3118		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 3118		RunNo: 4594					
Prep Date:	7/31/2012		Analysis Date: 8/1/2012		SeqNo: 129278		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.4	70	130			
Surr: 4-Bromofluorobenzene	0.36		0.5000		71.6	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		82.0	70	130			
Surr: Toluene-d8	0.41		0.5000		81.9	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120975		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4233			RunNo: 4233					
Prep Date:	Analysis Date: 7/20/2012			SeqNo: 120975			Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.0	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4233			RunNo: 4233					
Prep Date:		Analysis Date: 7/20/2012			SeqNo: 120980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	22	1.0	20.00	0	109	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.6	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.5	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R4233		RunNo: 4233					
Prep Date:			Analysis Date: 7/20/2012		SeqNo: 120980		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID	1207711-001a ms		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4233		RunNo: 4233					
Prep Date:			Analysis Date: 7/20/2012		SeqNo: 120981		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	66.8	128			
Toluene	23	1.0	20.00	0	116	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID	1207711-001a msd			SampType: MSD	TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4233		RunNo: 4233					
Prep Date:	Analysis Date: 7/20/2012			SeqNo: 120982		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	66.8	128	0.0297	16.7	
Toluene	22	1.0	20.00	0	110	70	130	4.99	18.7	
Chlorobenzene	21	1.0	20.00	0	104	70	130	0.103	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130	7.04	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.3	70	130	2.25	17.5	
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	12		10.00		119	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122005		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122005		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122005		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4379			RunNo: 4379					
Prep Date:		Analysis Date: 7/23/2012			SeqNo: 122008		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	84.1	126			
Toluene	19	1.0	20.00	0	95.5	80	120			
Chlorobenzene	20	1.0	20.00	0	97.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.5	83	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122636		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122636		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122639		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	84.1	126			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.6	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	84.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/24/2012			SeqNo: 122639		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	1207922-010a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4402			RunNo: 4402					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 122640		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	66.8	128			
Toluene	21	1.0	20.00	0.7840	103	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	1207922-010a msd	SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID:	R4402		RunNo:	4402					
Prep Date:		Analysis Date:	7/25/2012		SeqNo:	122641		Units:	µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	20	1.0	20.00	0	102	66.8	128	0.357	16.7		
Toluene	20	1.0	20.00	0.7840	97.4	70	130	4.94	18.7		
Chlorobenzene	19	1.0	20.00	0	96.4	70	130	5.90	19.5		
1,1-Dichloroethene	18	1.0	20.00	0	90.7	70	130	5.30	16.7		
Trichloroethene (TCE)	17	1.0	20.00	0	86.6	70	130	0.772	17.5		
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130	0	0		
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0		
Surr: Dibromofluoromethane	10		10.00		103	70	130	0	0		
Surr: Toluene-d8	10		10.00		102	70	130	0	0		

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125370		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125370		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125370		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/25/2012			SeqNo: 125371		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	84.1	126			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	20	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.8	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.4	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs2		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125372	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	84.1	126			
Toluene	20	1.0	20.00	0	99.6	80	120			
Chlorobenzene	20	1.0	20.00	0	98.3	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.2	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	82.9	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		99.6	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	1207949-001a ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/25/2012		SeqNo:	125377	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.9	66.8	128			
Toluene	21	1.0	20.00	0.7920	102	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.2	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	85.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID	1207a22-002ams		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	R4468		RunNo:	4468			
Prep Date:			Analysis Date:	7/26/2012		SeqNo:	125378	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	990	50	1000	0	99.1	70	130			
1,1-Dichloroethene	910	50	1000	0	91.0	70	130			
Trichloroethene (TCE)	870	50	1000	0	86.7	70	130			
Surr: 1,2-Dichloroethane-d4	460		500.0		92.4	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.8	70	130			
Surr: Dibromofluoromethane	510		500.0		102	70	130			
Surr: Toluene-d8	500		500.0		101	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207a22-002amsd			SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES				
Client ID:	BatchQC			Batch ID:	R4468		RunNo:	4468				
Prep Date:				Analysis Date:	7/26/2012		SeqNo:	125380		Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Chlorobenzene	1000	50	1000	0	101	70	130	1.54	19.5			
1,1-Dichloroethene	870	50	1000	0	86.5	70	130	4.99	16.7			
Trichloroethene (TCE)	850	50	1000	0	85.2	70	130	1.72	17.5			
Surr: 1,2-Dichloroethane-d4	470		500.0		93.1	70	130	0	0			
Surr: 4-Bromofluorobenzene	480		500.0		96.2	70	130	0	0			
Surr: Dibromofluoromethane	520		500.0		104	70	130	0	0			
Surr: Toluene-d8	520		500.0		105	70	130	0	0			

Sample ID	1207949-001a msd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R4468		RunNo: 4468					
Prep Date:			Analysis Date: 7/25/2012		SeqNo: 125381		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.7848	97.8	66.8	128	0.104	16.7	
Toluene	20	1.0	20.00	0.7920	96.9	70	130	4.87	18.7	
Chlorobenzene	19	1.0	20.00	0	96.2	70	130	7.41	19.5	
1,1-Dichloroethene	18	1.0	20.00	0	87.7	70	130	3.88	16.7	
Trichloroethene (TCE)	17	1.0	20.00	0	83.0	70	130	2.51	17.5	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Sample ID	b15	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4468			RunNo: 4468					
Prep Date:		Analysis Date: 7/26/2012			SeqNo: 125426		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b15	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R4468			RunNo: 4468						
Prep Date:	Analysis Date: 7/26/2012			SeqNo: 125426		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b15	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R4468			RunNo: 4468						
Prep Date:	Analysis Date: 7/26/2012			SeqNo: 125426		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID 5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R4498			RunNo: 4498						
Prep Date:	Analysis Date: 7/27/2012			SeqNo: 126086		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4498			RunNo: 4498					
Prep Date:		Analysis Date: 7/27/2012			SeqNo: 126086		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4498			RunNo: 4498					
Prep Date:		Analysis Date: 7/27/2012			SeqNo: 126086		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID	100ng lcsb	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R4498			RunNo: 4498					
Prep Date:		Analysis Date: 7/27/2012			SeqNo: 126090		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	84.1	126			
Toluene	22	1.0	20.00	0	108	80	120			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.7	83	130			
Trichloroethene (TCE)	17	1.0	20.00	0	87.3	76.2	119			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID	1207a57-001ams	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4498			RunNo: 4498					
Prep Date:		Analysis Date: 7/27/2012			SeqNo: 126091		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	1100	50	1000	147.3	97.1	70	130			
Chlorobenzene	1000	50	1000	0	100	70	130			
1,1-Dichloroethene	870	50	1000	0	87.0	70	130			
Trichloroethene (TCE)	850	50	1000	0	85.3	70	130			
Surr: 1,2-Dichloroethane-d4	470		500.0		93.5	70	130			
Surr: 4-Bromofluorobenzene	490		500.0		98.0	70	130			
Surr: Dibromofluoromethane	530		500.0		106	70	130			
Surr: Toluene-d8	520		500.0		104	70	130			

Sample ID	1207a57-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID:	R4498	RunNo:	4498					
Prep Date:		Analysis Date:	7/27/2012	SeqNo:	126092	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207a57-001amsd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC	Batch ID: R4498			RunNo: 4498					
Prep Date:	Analysis Date: 7/27/2012			SeqNo: 126092		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	1100	50	1000	147.3	95.6	70	130	1.34	18.7	
Chlorobenzene	980	50	1000	0	98.4	70	130	1.66	19.5	
1,1-Dichloroethene	800	50	1000	0	80.4	70	130	7.82	16.7	
Trichloroethene (TCE)	810	50	1000	0	80.6	70	130	5.66	17.5	
Surr: 1,2-Dichloroethane-d4	460		500.0		91.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	500		500.0		99.5	70	130	0	0	
Surr: Dibromofluoromethane	530		500.0		106	70	130	0	0	
Surr: Toluene-d8	520		500.0		104	70	130	0	0	

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4537			RunNo: 4537					
Prep Date:		Analysis Date: 7/30/2012			SeqNo: 127430		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R4537			RunNo: 4537					
Prep Date:		Analysis Date: 7/30/2012			SeqNo: 127430		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene chloride	ND	3.0								
n-Butylbenzene	ND	1.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	8.9		10.00		89.0	70	130			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID 5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R4537			RunNo: 4537						
Prep Date:	Analysis Date: 7/30/2012			SeqNo: 127430		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R4537			RunNo: 4537						
Prep Date:	Analysis Date: 7/30/2012			SeqNo: 127433		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.1	84.1	126			
Toluene	20	1.0	20.00	0	98.4	80	120			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	83.3	83	130			
Trichloroethene (TCE)	16	1.0	20.00	0	79.3	76.2	119			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.9	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID 1207b41-001a ms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: BatchQC	Batch ID: R4537			RunNo: 4537						
Prep Date:	Analysis Date: 7/30/2012			SeqNo: 127434		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	56000	50	1000	57800	-161	66.8	128			SE
Toluene	62000	50	1000	60240	223	70	130			SE
Chlorobenzene	1000	50	1000	0	103	70	130			
1,1-Dichloroethene	830	50	1000	0	83.4	70	130			
Trichloroethene (TCE)	810	50	1000	0	80.8	70	130			
Surr: 1,2-Dichloroethane-d4	430		500.0		87.0	70	130			
Surr: 4-Bromofluorobenzene	500		500.0		100	70	130			
Surr: Dibromofluoromethane	440		500.0		87.4	70	130			
Surr: Toluene-d8	540		500.0		108	70	130			

Sample ID 1207b41-001a msd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: BatchQC	Batch ID: R4537			RunNo: 4537						
Prep Date:	Analysis Date: 7/30/2012			SeqNo: 127435		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	57000	50	1000	57800	-55.7	66.8	128	1.86	16.7	SE
Toluene	59000	50	1000	60240	-131	70	130	5.82	18.7	SE
Chlorobenzene	990	50	1000	0	98.7	70	130	4.19	19.5	
1,1-Dichloroethene	790	50	1000	0	78.8	70	130	5.63	16.7	
Trichloroethene (TCE)	820	50	1000	0	82.2	70	130	1.72	17.5	

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID 1207b41-001a msd		SampType: MSD			TestCode: EPA Method 8260B: VOLATILES					
Client ID: BatchQC		Batch ID: R4537			RunNo: 4537					
Prep Date:		Analysis Date: 7/30/2012			SeqNo: 127435		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	450		500.0		89.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	490		500.0		98.0	70	130	0	0	
Surr: Dibromofluoromethane	450		500.0		90.7	70	130	0	0	
Surr: Toluene-d8	520		500.0		103	70	130	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3024		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 3024			RunNo: 4492				
Prep Date:	7/25/2012		Analysis Date: 7/27/2012			SeqNo: 125905		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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3024		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	3024		RunNo:	4492			
Prep Date:	7/25/2012		Analysis Date:	7/27/2012		SeqNo:	125905		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.7	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		77.6	19	133			
Surr: 2-Fluorophenol	2.0		3.330		60.2	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		78.0	18.9	115			
Surr: Nitrobenzene-d5	1.1		1.670		67.4	20.8	123			
Surr: Phenol-d5	2.4		3.330		70.9	19.8	115			

Sample ID	ics-3024		SampType:	LCS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	LCSS		Batch ID:	3024		RunNo:	4492			
Prep Date:	7/25/2012		Analysis Date:	7/27/2012		SeqNo:	125907		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-3024	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 3024			RunNo: 4492					
Prep Date:	7/25/2012	Analysis Date: 7/27/2012			SeqNo: 125907		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	70.7	49.7	98.1			
4-Chloro-3-methylphenol	2.3	0.50	3.330	0	70.3	43.8	89.1			
2-Chlorophenol	2.1	0.20	3.330	0	61.7	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	63.5	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	78.9	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	72.4	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	85.9	44.2	107			
Pentachlorophenol	2.5	0.40	3.330	0	74.5	36.2	80			
Phenol	2.4	0.20	3.330	0	71.3	42.7	92.7			
Pyrene	1.1	0.20	1.670	0	67.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	72.9	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.0	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		74.2	19	133			
Surr: 2-Fluorophenol	1.9		3.330		57.9	20.2	108			
Surr: 4-Terphenyl-d14	1.4		1.670		84.5	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		70.6	20.8	123			
Surr: Phenol-d5	2.3		3.330		68.9	19.8	115			

Sample ID	1207922-008Cms	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 3024			RunNo: 4492					
Prep Date:	7/25/2012	Analysis Date: 7/27/2012			SeqNo: 125927		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.7	0.40	1.674	0	101	38.6	100			S
4-Chloro-3-methylphenol	2.8	1.0	3.339	0	84.9	35.8	108			
2-Chlorophenol	2.7	0.40	3.339	0	81.4	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.40	1.674	0	73.3	42.5	97.6			
2,4-Dinitrotoluene	1.2	1.0	1.674	0	68.9	51.2	108			
N-Nitrosodi-n-propylamine	ND	0.40	1.674	0	0	31.6	114			S
4-Nitrophenol	2.1	0.50	3.339	0	63.0	22.7	144			
Pentachlorophenol	2.2	0.80	3.339	0	64.8	24	109			
Phenol	3.0	0.40	3.339	0	88.9	33.1	108			
Pyrene	1.6	0.40	1.674	0.2483	83.5	42.7	98.9			
1,2,4-Trichlorobenzene	1.2	0.40	1.674	0	69.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.2		3.339		67.3	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.674		76.2	19	133			
Surr: 2-Fluorophenol	2.4		3.339		71.5	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.674		90.0	18.9	115			
Surr: Nitrobenzene-d5	0		1.674		0	20.8	123			S
Surr: Phenol-d5	2.8		3.339		83.5	19.8	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207922-008Cmsd	SampType: MSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 3024			RunNo: 4492					
Prep Date:	7/25/2012	Analysis Date: 7/27/2012			SeqNo: 125928		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.40	1.671	0	86.7	38.6	100	15.9	20	S
4-Chloro-3-methylphenol	2.8	1.0	3.332	0	84.1	35.8	108	1.20	20	
2-Chlorophenol	2.6	0.40	3.332	0	76.5	48.2	96.1	6.31	20	
1,4-Dichlorobenzene	1.2	0.40	1.671	0	70.6	42.5	97.6	3.92	20	
2,4-Dinitrotoluene	1.3	1.0	1.671	0	75.0	51.2	108	8.24	20	
N-Nitrosodi-n-propylamine	ND	0.40	1.671	0	0	31.6	114	0	20	
4-Nitrophenol	2.0	0.50	3.332	0	61.2	22.7	144	3.20	20	
Pentachlorophenol	2.4	0.80	3.332	0	72.1	24	109	10.3	20	
Phenol	2.7	0.40	3.332	0	80.9	33.1	108	9.61	20	
Pyrene	1.5	0.40	1.671	0.2483	75.5	42.7	98.9	8.58	20	
1,2,4-Trichlorobenzene	1.2	0.40	1.671	0	74.3	27.1	118	6.12	20	
Surr: 2,4,6-Tribromophenol	2.3		3.332		69.8	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.2		1.671		70.5	19	133	0	0	
Surr: 2-Fluorophenol	2.4		3.332		71.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.4		1.671		84.2	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.2		1.671		74.7	20.8	123	0	0	
Surr: Phenol-d5	2.7		3.332		80.4	19.8	115	0	0	

Sample ID	mb-3046		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 3046		RunNo: 4555					
Prep Date:	7/26/2012		Analysis Date: 7/31/2012		SeqNo: 127860		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	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3046		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 3046			RunNo: 4555				
Prep Date:	7/26/2012		Analysis Date: 7/31/2012			SeqNo: 127860		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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								

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-3046		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 3046		RunNo: 4555					
Prep Date:	7/26/2012		Analysis Date: 7/31/2012		SeqNo: 127860		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	1.6		3.330		49.3	20.1	121			
Surr: 2-Fluorobiphenyl	0.71		1.670		42.7	19	133			
Surr: 2-Fluorophenol	1.2		3.330		34.6	20.2	108			
Surr: 4-Terphenyl-d14	0.73		1.670		43.6	18.9	115			
Surr: Nitrobenzene-d5	0.67		1.670		39.9	20.8	123			
Surr: Phenol-d5	1.3		3.330		38.0	19.8	115			

Sample ID	lcs-3046		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 3046		RunNo: 4555					
Prep Date:	7/26/2012		Analysis Date: 7/31/2012		SeqNo: 127861		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	70.9	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	74.2	43.8	89.1			
2-Chlorophenol	2.2	0.20	3.330	0	66.0	41.1	96.9			
1,4-Dichlorobenzene	1.0	0.20	1.670	0	60.6	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.9	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	74.9	39.1	86.9			
4-Nitrophenol	3.0	0.25	3.330	0	91.2	44.2	107			
Pentachlorophenol	2.6	0.40	3.330	0	78.4	36.2	80			
Phenol	2.3	0.20	3.330	0	70.2	42.7	92.7			
Pyrene	1.1	0.20	1.670	0	68.4	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	70.8	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.0		3.330		91.5	20.1	121			
Surr: 2-Fluorobiphenyl	1.2		1.670		71.4	19	133			
Surr: 2-Fluorophenol	1.9		3.330		56.8	20.2	108			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	18.9	115			
Surr: Nitrobenzene-d5	1.2		1.670		69.2	20.8	123			
Surr: Phenol-d5	2.4		3.330		71.7	19.8	115			

Qualifiers:

* / X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207940-019Cms	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 14-19 (0-0.5')	Batch ID:	3046	RunNo:	4555					
Prep Date:	7/26/2012	Analysis Date:	7/31/2012	SeqNo:	127874	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.99	1.660	0	85.1	38.6	100			
4-Chloro-3-methylphenol	2.6	2.5	3.310	0	78.4	35.8	108			
2-Chlorophenol	2.7	0.99	3.310	0	81.1	48.2	96.1			
1,4-Dichlorobenzene	ND	0.99	1.660	0	52.6	42.5	97.6			
2,4-Dinitrotoluene	ND	2.5	1.660	0	85.7	51.2	108			
N-Nitrosodi-n-propylamine	1.3	0.99	1.660	0	80.5	31.6	114			
4-Nitrophenol	3.1	1.2	3.310	0	93.7	22.7	144			
Pentachlorophenol	2.3	2.0	3.310	0	68.5	24	109			
Phenol	2.6	0.99	3.310	0	77.6	33.1	108			
Pyrene	1.3	0.99	1.660	0	76.4	42.7	98.9			
1,2,4-Trichlorobenzene	1.3	0.99	1.660	0	75.7	27.1	118			
Surr: 2,4,6-Tribromophenol	3.2		3.310		95.8	20.1	121			
Surr: 2-Fluorobiphenyl	1.5		1.660		92.9	19	133			
Surr: 2-Fluorophenol	2.5		3.310		76.5	20.2	108			
Surr: 4-Terphenyl-d14	1.7		1.660		102	18.9	115			
Surr: Nitrobenzene-d5	1.5		1.660		91.6	20.8	123			
Surr: Phenol-d5	2.9		3.310		87.9	19.8	115			

Sample ID	1207940-019Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 14-19 (0-0.5')	Batch ID:	3046	RunNo:	4555					
Prep Date:	7/26/2012	Analysis Date:	7/31/2012	SeqNo:	127875	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	1.0	1.667	0	88.2	38.6	100	3.97	20	
4-Chloro-3-methylphenol	2.5	2.5	3.323	0	76.3	35.8	108	2.32	20	
2-Chlorophenol	2.7	1.0	3.323	0	81.7	48.2	96.1	1.14	20	
1,4-Dichlorobenzene	ND	1.0	1.667	0	53.7	42.5	97.6	0	20	
2,4-Dinitrotoluene	ND	2.5	1.667	0	85.3	51.2	108	0	20	
N-Nitrosodi-n-propylamine	1.5	1.0	1.667	0	90.9	31.6	114	12.5	20	
4-Nitrophenol	2.8	1.2	3.323	0	83.9	22.7	144	10.6	20	
Pentachlorophenol	2.3	2.0	3.323	0	70.3	24	109	3.07	20	
Phenol	2.7	1.0	3.323	0	80.4	33.1	108	3.94	20	
Pyrene	1.4	1.0	1.667	0	83.0	42.7	98.9	8.66	20	
1,2,4-Trichlorobenzene	1.3	1.0	1.667	0	80.3	27.1	118	6.28	20	
Surr: 2,4,6-Tribromophenol	3.5		3.323		106	20.1	121	0	0	
Surr: 2-Fluorobiphenyl	1.6		1.667		96.8	19	133	0	0	
Surr: 2-Fluorophenol	2.5		3.323		75.0	20.2	108	0	0	
Surr: 4-Terphenyl-d14	1.8		1.667		108	18.9	115	0	0	
Surr: Nitrobenzene-d5	1.5		1.667		90.8	20.8	123	0	0	
Surr: Phenol-d5	3.1		3.323		91.9	19.8	115	0	0	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 2989			RunNo: 4400				
Prep Date:	7/24/2012		Analysis Date: 7/24/2012			SeqNo: 122513		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2989		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 2989			RunNo: 4400				
Prep Date:	7/24/2012		Analysis Date: 7/24/2012			SeqNo: 122513		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	20								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	170		200.0		85.4	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		85.5	37	114			
Surr: 2-Fluorophenol	120		200.0		61.4	23.4	98			
Surr: 4-Terphenyl-d14	79		100.0		79.3	41.3	116			
Surr: Nitrobenzene-d5	84		100.0		84.2	39.5	118			
Surr: Phenol-d5	110		200.0		53.2	20.9	95.9			

Qualifiers:

* /X Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-2989	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 2989			RunNo: 4400					
Prep Date:	7/24/2012	Analysis Date: 7/24/2012			SeqNo: 122514		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.1	38.2	99.4			
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	35.5	108			
2-Chlorophenol	130	10	200.0	0	62.6	29.8	106			
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5			
2,4-Dinitrotoluene	83	10	100.0	0	82.7	44.7	112			
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.3	38.5	105			
4-Nitrophenol	95	10	200.0	0	47.3	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	61.2	20.2	93			
Phenol	84	10	200.0	0	42.0	23	66.1			
Pyrene	71	10	100.0	0	71.2	40.1	101			
1,2,4-Trichlorobenzene	54	10	100.0	0	53.7	37.7	99.1			
Surr: 2,4,6-Tribromophenol	160		200.0		81.9	44.2	126			
Surr: 2-Fluorobiphenyl	73		100.0		72.8	37	114			
Surr: 2-Fluorophenol	98		200.0		49.2	23.4	98			
Surr: 4-Terphenyl-d14	71		100.0		70.6	41.3	116			
Surr: Nitrobenzene-d5	65		100.0		65.1	39.5	118			
Surr: Phenol-d5	91		200.0		45.5	20.9	95.9			

Sample ID	Icsd-2989		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 2989		RunNo: 4400					
Prep Date:	7/24/2012		Analysis Date: 7/24/2012		SeqNo: 122515		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	70	10	100.0	0	69.9	38.2	99.4	2.61	20	
4-Chloro-3-methylphenol	160	10	200.0	0	81.3	35.5	108	13.1	20	
2-Chlorophenol	110	10	200.0	0	55.6	29.8	106	11.9	20	
1,4-Dichlorobenzene	47	10	100.0	0	46.8	32.6	91.5	0.0854	20	
2,4-Dinitrotoluene	91	10	100.0	0	91.2	44.7	112	9.75	20	
N-Nitrosodi-n-propylamine	75	10	100.0	0	74.6	38.5	105	5.82	20	
4-Nitrophenol	92	10	200.0	0	46.1	11.6	73.1	2.55	20	
Pentachlorophenol	110	20	200.0	0	57.5	20.2	93	6.30	20	
Phenol	83	10	200.0	0	41.5	23	66.1	1.15	20	
Pyrene	71	10	100.0	0	71.2	40.1	101	0	20	
1,2,4-Trichlorobenzene	56	10	100.0	0	55.5	37.7	99.1	3.33	20	
Surr: 2,4,6-Tribromophenol	150		200.0		75.1	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	73		100.0		73.1	37	114	0	0	
Surr: 2-Fluorophenol	81		200.0		40.7	23.4	98	0	0	
Surr: 4-Terphenyl-d14	80		100.0		79.8	41.3	116	0	0	
Surr: Nitrobenzene-d5	70		100.0		70.1	39.5	118	0	0	
Surr: Phenol-d5	88		200.0		44.2	20.9	95.9	0	0	

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3130		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 3130		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128924		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-3130		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 3130		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128925		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	97.2	80	120			

Sample ID	1207940-002CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 14-10 (1.5-2.		Batch ID: 3130		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128936		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.60	0.16	0.1647	0.2056	237	75	125			S

Sample ID	1207940-002CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 14-10 (1.5-2.		Batch ID: 3130		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128937		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.60	0.16	0.1648	0.2056	240	75	125	1.01	20	S

Sample ID	MB-3131		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128955		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-3131		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128956		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	93.3	80	120			

Sample ID	1207B18-001BMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 3131		RunNo: 4597					
Prep Date:	8/1/2012		Analysis Date: 8/2/2012		SeqNo: 128971		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.21	0.033	0.1648	0.06444	87.3	75	125			

Qualifiers:

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B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207B18-001BMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	BatchQC	Batch ID:	3131	RunNo:	4597					
Prep Date:	8/1/2012	Analysis Date:	8/2/2012	SeqNo:	128972	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1651	0.06444	84.5	75	125	2.10	20	

Qualifiers:

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E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3008		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	3008		RunNo:	4553			
Prep Date:	7/24/2012		Analysis Date:	7/31/2012		SeqNo:	127775		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								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-3008		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	3008		RunNo:	4553			
Prep Date:	7/24/2012		Analysis Date:	7/31/2012		SeqNo:	127776		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0	99.1	80	120			
Arsenic	25	2.5	25.00	0	99.4	80	120			
Barium	23	0.10	25.00	0	91.4	80	120			
Beryllium	25	0.15	25.00	0	99.8	80	120			
Cadmium	24	0.10	25.00	0	95.2	80	120			
Chromium	23	0.30	25.00	0	91.3	80	120			
Lead	23	0.25	25.00	0	91.5	80	120			
Manganese	23	0.10	25.00	0	90.9	80	120			
Nickel	22	0.50	25.00	0	89.6	80	120			
Selenium	27	2.5	25.00	0	107	80	120			
Vanadium	24	2.5	25.00	0	94.7	80	120			
Zinc	23	2.5	25.00	0.7005	90.4	80	120			

Sample ID	MB-3008		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	3008		RunNo:	4605			
Prep Date:	7/24/2012		Analysis Date:	8/1/2012		SeqNo:	129181		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								
Iron	1.0	1.0								
Silver	ND	0.25								

Qualifiers:

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E Value above quantitation range
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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3008		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3008		RunNo: 4605					
Prep Date:	7/24/2012		Analysis Date: 8/1/2012		SeqNo: 129182		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	25	0.30	25.00	0	98.5	80	120			
Iron	25	1.0	25.00	1.039	96.0	80	120			B
Silver	5.1	0.25	5.000	0.05000	101	80	120			

Sample ID	1207940-020CMS	SampType: MS		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	SWMU 14-19 (1.5-2.	Batch ID: 3008		RunNo: 4605						
Prep Date:	7/24/2012	Analysis Date: 8/1/2012		SeqNo: 129201		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.88	0	47.5	75	125			S
Arsenic	24	12	24.88	0	97.0	75	125			
Beryllium	26	0.75	24.88	0.8069	99.9	75	125			
Cadmium	24	0.50	24.88	0	95.6	75	125			
Chromium	38	1.5	24.88	11.91	106	75	125			
Cobalt	28	1.5	24.88	4.819	95.1	75	125			
Lead	29	1.2	24.88	4.128	99.7	75	125			
Nickel	32	2.5	24.88	8.015	95.1	75	125			
Selenium	17	12	24.88	0	67.6	75	125			
Silver	4.6	1.2	4.976	0	93.1	75	125			
Vanadium	50	12	24.88	21.23	117	75	125			
Zinc	61	12	24.88	33.83	108	75	125			

Sample ID	1207940-020CMSD	SampType: MSD		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	SWMU 14-19 (1.5-2.	Batch ID: 3008		RunNo: 4605						
Prep Date:	7/24/2012	Analysis Date: 8/1/2012		SeqNo: 129202		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.62	0	38.2	75	125	0	20	SR
Arsenic	21	12	24.62	0	83.9	75	125	15.5	20	
Beryllium	23	0.75	24.62	0.8069	92.2	75	125	8.77	20	
Cadmium	22	0.50	24.62	0	88.1	75	125	9.20	20	
Chromium	33	1.5	24.62	11.91	87.6	75	125	13.1	20	
Cobalt	25	1.5	24.62	4.819	83.8	75	125	11.2	20	
Lead	28	1.2	24.62	4.128	95.3	75	125	4.83	20	
Nickel	28	2.5	24.62	8.015	80.0	75	125	13.3	20	
Selenium	18	12	24.62	0	74.2	75	125	8.38	20	
Silver	4.1	1.2	4.924	0	84.1	75	125	11.3	20	S
Vanadium	46	12	24.62	21.23	102	75	125	8.17	20	
Zinc	51	12	24.62	33.83	69.2	75	125	17.5	20	

Qualifiers:

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B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-3009		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 3009		RunNo: 4698					
Prep Date:	7/24/2012		Analysis Date: 8/6/2012		SeqNo: 132140		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4698					
Prep Date:	7/24/2012		Analysis Date: 8/6/2012		SeqNo: 132141		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	26	1.0	25.00	0.9555	99.3	80	120			

Sample ID	MB-3009	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 3009			RunNo: 4699					
Prep Date:	7/24/2012	Analysis Date: 8/5/2012			SeqNo: 132220		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								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132221		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	28	2.5	25.00	0	114	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	27	0.10	25.00	0	107	80	120			
Beryllium	29	0.15	25.00	0.01250	117	80	120			
Cadmium	27	0.10	25.00	0	110	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Cobalt	29	0.30	25.00	0	115	80	120			
Lead	27	0.25	25.00	0	110	80	120			

Qualifiers:

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R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS-3009		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132221		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	26	0.10	25.00	0.07300	106	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	30	2.5	25.00	0	121	80	120			S
Silver	5.4	0.25	5.000	0	108	80	120			
Vanadium	27	2.5	25.00	0.07050	109	80	120			
Zinc	29	2.5	25.00	0	116	80	120			

Sample ID	1207917-005CMS	SampType: MS		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	BatchQC	Batch ID: 3009		RunNo: 4699						
Prep Date:	7/24/2012	Analysis Date: 8/5/2012		SeqNo: 132249			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	21	12	23.84	0	89.4	75	125			
Beryllium	24	0.75	23.84	0.6761	97.6	75	125			
Cadmium	22	0.50	23.84	0	90.6	75	125			
Chromium	29	1.5	23.84	8.850	84.7	75	125			
Cobalt	26	1.5	23.84	4.445	90.6	75	125			
Lead	23	1.2	23.84	3.311	82.6	75	125			
Nickel	27	2.5	23.84	6.181	86.9	75	125			
Silver	4.0	1.2	4.768	0	83.8	75	125			

Sample ID	1207917-005CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC		Batch ID: 3009		RunNo: 4699					
Prep Date:	7/24/2012		Analysis Date: 8/5/2012		SeqNo: 132250		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	12	24.91	0	94.6	75	125	9.99	20	
Beryllium	25	0.75	24.91	0.6761	98.4	75	125	5.04	20	
Cadmium	23	0.50	24.91	0	90.6	75	125	4.33	20	
Chromium	32	1.5	24.91	8.850	94.1	75	125	10.6	20	
Cobalt	27	1.5	24.91	4.445	91.3	75	125	4.29	20	
Lead	25	1.2	24.91	3.311	87.3	75	125	8.61	20	
Nickel	29	2.5	24.91	6.181	91.7	75	125	7.56	20	
Silver	4.4	1.2	4.982	0	88.1	75	125	9.44	20	

Sample ID	1207917-005CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4734					
Prep Date:	7/24/2012	Analysis Date: 8/8/2012			SeqNo: 133485		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	13	12	23.84	0	54.1	75	125			S
Vanadium	43	12	23.84	31.42	47.7	75	125			S

Qualifiers:

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B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207940

21-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207917-005CMSD	SampType: MSD			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4734					
Prep Date:	7/24/2012	Analysis Date: 8/8/2012			SeqNo: 133486		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	14	12	24.91	0	57.7	75	125	10.9	20	S
Vanadium	55	12	24.91	31.42	93.0	75	125	24.2	20	R

Sample ID	1207917-005CMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 3009			RunNo: 4816					
Prep Date:	7/24/2012	Analysis Date: 8/10/2012			SeqNo: 135933		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	23.84	3.961	28.4	75	125			S
Zinc	35	13	23.84	16.80	76.6	75	125			

Sample ID	1207917-005CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	3009	RunNo:	4816					
Prep Date:	7/24/2012	Analysis Date:	8/10/2012	SeqNo:	135934	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.91	3.961	34.3	75	125	0	20	S
Zinc	39	13	24.91	16.80	90.3	75	125	11.4	20	

Qualifiers:

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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

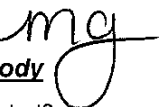
Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1207940

Received by/date:  07/20/12
Logged By: Ashley Gallegos 7/20/2012 2:26:00 PM 

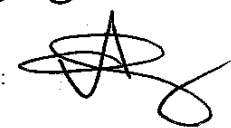
Completed By: Ashley Gallegos 7/20/2012 2:44:32 PM 

Reviewed By:  07/20/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: 43
(<2 or >12 unless noted)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by: 

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Not Present			

Chain-of-Custody Record				Turn-Around Time:			
Client: <u>WESTERN REFINING & SWIN</u>				☒ Standard ☐ Rush			
Gallup Refinery				Project Name: <u>SNMU No. 14</u>			
Mailing Address: <u>ROUTE 3 Box 7</u>				Project #:			
Gallup, NM 87301				Project Manager: <u>SCOTT CROUCH - RPS</u>			
Phone #: <u>505-722-0217</u>				Sampler: <u>TRACY PAYNE</u>			
email or Fax#: <u>SCOTT CROUCH - RPS</u>				On Ice: ☒ Yes ☐ No			
QA/QC Package: ☒ Standard ☐ NELAP ☐ Other				Sample Temperature: <u>37.0</u>			
Accreditation: <u>EXCEL</u>				HEAL No. <u>1207940</u>			
EDD (Type) <u>EXCEL</u>				Preservative Type			
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	
7/19/12	1100	Soil	SNMU 14-10 (0-0.5')	Z ENCORES	-	-001	
				Z VIALS	MEOH		
				Z JARS	-		
1105		Soil	SNMU 14-10 (1.5-2.0')	Z ENCORES	-	-002	
				Z VIALS	MEOH		
				Z JARS	=		
1127		Soil	SNMU 14-8 (0-0.5')	Z ENCORES	-	-003	
				Z VIALS	MEOH		
				Z JARS	-		
1140		Soil	SNMU 14-8 (1.5-2.0')	Z ENCORES	-	-004	
				Z VIALS	MEOH		
				Z JARS	-		

Date:	Time:	Relinquished by:	Date:	Time:
7/20/12	1426	[Signature]	7/20/12	1426
Date:	Time:	Relinquished by:	Date:	Time:

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Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
7/9/12	1100	Soil SWMU 14-10 (0-0.5')	↓ ↓	ZENCORES ZVIALS ZJARS	- MEOH -	--001
11/05	801L	SWMU 14-10 (1.5-2.0')	↓ ↓	ZENCORES ZVIALS ZJARS	- MEOH =	--002
11/27	801L	SWMU 14-8 (0-0.5')	↓ ↓	ZENCORES ZVIALS ZJARS	- MEOH -	--003
11/40	801L	SWMU 14-8 (1.5-2.0')	↓ ↓	ZENCORES ZVIALS ZJARS	- MEOH -	--004

Project Manager: **SCOTT CROUCH - RPS**

Sampler: **TRACY PAYNE**

On Ice: ☒ Yes ☐ No

Sample Temperature: **3.6**

Received by: *[Signature]* Date: **7/20/12** Time: **1426**

Relinquished by: *[Signature]* Date: **7/20/12** Time: **1426**

[illegible]

Remarks:

Date: 1/29/12	Time: 1426	Relinquished by: 	Received by: 	Date: 7/29/12	Time: 1426
Date:	Time:	Relinquished by:	Received by:	Date:	Time:

Chain-of-Custody Record				
Client: WESTERN REFINING SW, INC.				
GALLUP REFINERY				
Mailing Address: ROUTE 3 BOX 7				
GALLUP, NM 87301				
Phone #: 505-722-0217				
email or Fax#: SCOTT CROUCH-RPS				
QA/QC Package: ☒ Standard ☐ NELAP ☐ Other				
Accreditation: ☒ Level 4 (Full Validation)				
EDD (Type) EXCEL				
Date	Time	Matrix	Sample Request ID	
7/19/12	1745	SOIL	SNMU 14-13 (1.5-2.0')	
			↓	
	1307		SNMU 14-14 (0-0.5')	
			↓	
	1312		SNMU 14-14 (1.5-2.0')	
			↓	
	1333		SNMU 14-11 (0-0.5')	
			↓	
			↓	
Date:	Time:	Relinquished by:		
7/20/12	1426	ST		
Date:	Time:	Relinquished by:		

Turn-Around Time:	☒ Standard ☐ Rush	Project Name:
		SWMU NO. 14
Project #:		
Project Manager:		SCOTT CROUCH-RPS
Sampler:	TRACY PAYNE	
On Ice:	☒ Yes ☐ No	
Sample Temperature:	3.0	
Container Type and #	Preservative Type	HEAL No.
ZENCORES	-	1207940
ZVIALS	MEOH	-009
ZIARS	-	
ZENCORES	-	-010
ZVIALS	MEOH	
ZIARS	-	
ZENCORES	-	-011
ZVIALS	MEOH	
ZIARS	-	
ZENCORES	-	-012
ZVIALS	MEOH	
ZIARS	-	
Received by:	Date	Time
	7/24/12	1426
Received by:	Date	Time

Turn-Around Time:		
☒ Standard	☐ Rush	
Project Name:		
SWMU NO. 14		
Project #:		
Project Manager:		
SCOTT CROUCH - RPS		
Sampler: TRACY PAYNE		
On Ice: ☒ Yes ☐ No		
Sample Temperature: 3.0		
Container Type and #	Preservative Type	HEAL No.
ZENCORES	-	1207940
ZVIALS	MeOH	-009
ZJARS	-	
ZENCORES	-	-010
ZVIALS	MeOH	
ZJARS	-	
ZENCORES	-	-011
ZVIALS	MeOH	
ZJARS	-	
ZENCORES	-	-012
ZVIALS	MeOH	
ZJARS	-	
Received by: 		Date Time
		7/24/12 1426
Received by:		Date Time

[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.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GAULP REFINERY
 Mailing Address: PO BOX 7
GAULP, NM 87301
 Phone #: 505-722-0217
 email or Fax#: SCOTT CROUCH-RPS
 QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
 Accreditation: ☒ NELAP ☐ Other EXCEL
 EDD (Type) EXCEL

Project Manager: SCOTT CROUCH-RPS
 Sampler: TRACY PAYNE
 On Ice: ☒ Yes ☐ No
 Sample Temperature: 3.0

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
7/19/12	1611	SOIL	SWMU 14-17 (0-0.5')	2 ENCORES	-	-021
				2 VIALS	MEOH	
				1 JAR	-	
	1618		SWMU 14-17 (1.5-2.0')	2 ENCORES	-	-022
				2 VIALS	MEOH	
				1 JAR	-	
	1645		SWMU 14-16 (0-0.5')	2 ENCORES	-	-023
				2 VIALS	MEOH	
				1 JAR	-	
	1651		SWMU 14-16 (1.5-2.0')	2 ENCORES	-	-024
				2 VIALS	MEOH	
				1 JAR	-	

Date: 7/19/12 Time: 1426
 Relinquished by: [Signature]
 Date: 7/19/12 Time: 1426
 Relinquished by: [Signature]

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU No. 14

Project #:

Project Manager:

SCOTT CROUCH-RPS

Sampler: TRACY PAYNE

On Ice: ☒ Yes ☐ No

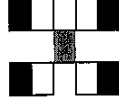
Sample Temperature: 3.0

Container Type and #	Preservative Type	HEAL No.
2 ENCORES	-	-021
2 VIALS	MEOH	
1 JAR	-	
2 ENCORES	-	-022
2 VIALS	MEOH	
1 JAR	-	
2 ENCORES	-	-023
2 VIALS	MEOH	
1 JAR	-	
2 ENCORES	-	-024
2 VIALS	MEOH	
1 JAR	-	

Received by: [Signature] Date: 7/24/12 Time: 1426

Received by: [Signature] Date: 7/24/12 Time: 1426

HALL ENVIRONMENTAL ANALYSIS LABORATORY



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

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TMB's (8021)	
BTEX + MTBE + TPH (Gas only)	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) + TPH GRO	
	8270 (Semi-VOA)	
	TPH MRO & DRO	
	METALS	
	Air Bubbles (Y or N)	

Remarks:

Chain-of-Custody Record									
Client: <u>WESTERN REFINING SWIN</u>									
Project Name: <u>GALLUP REFINERY</u>									
Mailing Address: <u>ROUTE 3 BOX 7</u>									
Project #: <u>GALLUP NM 87301</u>									
Phone #: <u>505-722-0217</u>									
email or Fax#: <u>SCOTT CROUCH-RPS</u>									
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)									
Accreditation ☐ NECAP ☐ Other									
EDD (Type) <u>EXCEL</u>									
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.			
7/19/12	1714	SOIL	SWMU 14-15 (0-0.5')	2 ENCORES	-	-025			
			↓	2 VIALS	MEOH				
			↓	1 JAR	-				
1719			SWMU 14-15 (1.5-2.0')	2 ENCORES	-	-020			
			↓	2 VIALS	MEOH				
			↓	1 JAR	-				
1750			SWMU 14-20 (0-0.5')	2 ENCORES	-	-027			
			↓	2 VIALS	MEOH				
			↓	1 JAR	-				
1750			SWMU 14-20 (0-0.5') DUP	2 ENCORES	-	-028			
			↓	2 VIALS	MEOH				
			↓	1 JAR	-				
			↓	2 ENCORES	-	-028			
			↓	2 VIALS	MEOH				
			↓	1 JAR	-				
Relinquished by: <u>[Signature]</u>				Received by: <u>[Signature]</u>					
Date: <u>7/20/12</u>	Time: <u>1420</u>			Date: <u>7/20/12</u>	Time: <u>1426</u>				
Date: <u>7/20/12</u>	Time: <u>1420</u>			Date: <u>7/20/12</u>	Time: <u>1426</u>				

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Analysis Request

[illegible]

Remarks:

Date	Time

Received by:

Relinquished by:

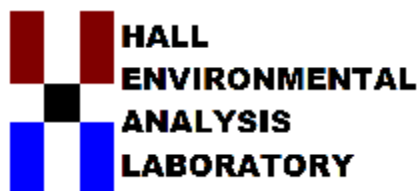
Date: _____

Date _____ Time _____

Received by:

Relinquished by:

Date:



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

November 14, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1210582

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/11/2012 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 30, 2012.

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 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:35:00 PM

Lab ID: 1210582-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 10:36:48 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/12/2012 10:36:48 AM
Surr: DNOP	104	77.6-140		%REC	1	10/12/2012 10:36:48 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 6:01:43 PM
Surr: BFB	105	84-116		%REC	1	10/12/2012 6:01:43 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:59:51 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 5:38:30 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:38:30 PM
Barium	350	1.0		mg/Kg	10	10/17/2012 2:56:55 PM
Beryllium	1.0	0.75		mg/Kg	5	10/16/2012 5:38:30 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:38:30 PM
Chromium	9.7	1.5		mg/Kg	5	10/16/2012 5:38:30 PM
Cobalt	5.0	1.5		mg/Kg	5	10/16/2012 5:38:30 PM
Iron	15000	500		mg/Kg	500	10/17/2012 2:59:21 PM
Lead	6.4	1.2		mg/Kg	5	10/16/2012 5:38:30 PM
Manganese	420	1.0		mg/Kg	10	10/17/2012 2:56:55 PM
Nickel	8.2	2.5		mg/Kg	5	10/16/2012 5:38:30 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:39:07 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:38:30 PM
Vanadium	17	12		mg/Kg	5	10/16/2012 5:38:30 PM
Zinc	17	12		mg/Kg	5	10/16/2012 5:38:30 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Aniline	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Anthracene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Azobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:35:00 PM

Lab ID: 1210582-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Carbazole	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Chrysene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/12/2012 6:23:08 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Fluorene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Isophorone	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Naphthalene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:35:00 PM

Lab ID: 1210582-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/12/2012 6:23:08 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/12/2012 6:23:08 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Phenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Pyrene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Pyridine	ND	1.0		mg/Kg	1	10/12/2012 6:23:08 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 6:23:08 PM
Surr: 2,4,6-Tribromophenol	51.9	21.3-145		%REC	1	10/12/2012 6:23:08 PM
Surr: 2-Fluorobiphenyl	50.9	20-131		%REC	1	10/12/2012 6:23:08 PM
Surr: 2-Fluorophenol	48.4	11.9-130		%REC	1	10/12/2012 6:23:08 PM
Surr: 4-Terphenyl-d14	48.3	25.1-149		%REC	1	10/12/2012 6:23:08 PM
Surr: Nitrobenzene-d5	48.5	25.6-137		%REC	1	10/12/2012 6:23:08 PM
Surr: Phenol-d5	51.0	20.3-132		%REC	1	10/12/2012 6:23:08 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00291	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Toluene	0.00336	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Ethylbenzene	0.00157	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Xylenes, Total	0.00786	0.00201		mg/Kg	1	10/11/2012 4:41:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2,4-Trimethylbenzene	0.00104	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Naphthalene	ND	0.00201		mg/Kg	1	10/11/2012 4:41:54 PM
1-Methylnaphthalene	ND	0.00402		mg/Kg	1	10/11/2012 4:41:54 PM
2-Methylnaphthalene	ND	0.00402		mg/Kg	1	10/11/2012 4:41:54 PM
Acetone	0.0973	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromoform	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2-Butanone	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:35:00 PM

Lab ID: 1210582-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Carbon disulfide	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Methylene chloride	ND	0.00302		mg/Kg	1	10/11/2012 4:41:54 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Styrene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/11/2012 4:41:54 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:35:00 PM

Lab ID: 1210582-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/11/2012 4:41:54 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/11/2012 4:41:54 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	1	10/11/2012 4:41:54 PM
Surr: Dibromofluoromethane	89.5	70-130		%REC	1	10/11/2012 4:41:54 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/11/2012 4:41:54 PM

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RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:45:00 PM

Lab ID: 1210582-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	260	9.9		mg/Kg	1	10/12/2012 12:46:40 PM
Motor Oil Range Organics (MRO)	320	50		mg/Kg	1	10/12/2012 12:46:40 PM
Surr: DNOP	108	77.6-140		%REC	1	10/12/2012 12:46:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 6:30:32 PM
Surr: BFB	105	84-116		%REC	1	10/12/2012 6:30:32 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.095	0.033		mg/kg	1	10/16/2012 5:01:40 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 5:43:36 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:43:36 PM
Barium	330	1.0		mg/Kg	10	10/17/2012 3:01:57 PM
Beryllium	0.78	0.75		mg/Kg	5	10/16/2012 5:43:36 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:43:36 PM
Chromium	23	1.5		mg/Kg	5	10/16/2012 5:43:36 PM
Cobalt	4.5	1.5		mg/Kg	5	10/16/2012 5:43:36 PM
Iron	13000	500		mg/Kg	500	10/17/2012 3:14:30 PM
Lead	5.6	1.2		mg/Kg	5	10/16/2012 5:43:36 PM
Manganese	370	1.0		mg/Kg	10	10/17/2012 3:01:57 PM
Nickel	7.1	2.5		mg/Kg	5	10/16/2012 5:43:36 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:44:25 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:43:36 PM
Vanadium	23	12		mg/Kg	5	10/16/2012 5:43:36 PM
Zinc	26	12		mg/Kg	5	10/16/2012 5:43:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Aniline	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Anthracene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Azobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM

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- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:45:00 PM

Lab ID: 1210582-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Carbazole	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Chrysene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/12/2012 7:51:10 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Fluorene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Isophorone	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Naphthalene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:45:00 PM

Lab ID: 1210582-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/12/2012 7:51:10 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/12/2012 7:51:10 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Phenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Pyrene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Pyridine	ND	0.99		mg/Kg	1	10/12/2012 7:51:10 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:51:10 PM
Surr: 2,4,6-Tribromophenol	91.1	21.3-145		%REC	1	10/12/2012 7:51:10 PM
Surr: 2-Fluorobiphenyl	75.4	20-131		%REC	1	10/12/2012 7:51:10 PM
Surr: 2-Fluorophenol	72.2	11.9-130		%REC	1	10/12/2012 7:51:10 PM
Surr: 4-Terphenyl-d14	76.8	25.1-149		%REC	1	10/12/2012 7:51:10 PM
Surr: Nitrobenzene-d5	73.4	25.6-137		%REC	1	10/12/2012 7:51:10 PM
Surr: Phenol-d5	73.9	20.3-132		%REC	1	10/12/2012 7:51:10 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Toluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Ethylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Xylenes, Total	ND	0.00162		mg/Kg	1	10/11/2012 5:12:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2,4-Trimethylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,3,5-Trimethylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dichloroethane (EDC)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dibromoethane (EDB)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Naphthalene	ND	0.00162		mg/Kg	1	10/11/2012 5:12:48 PM
1-Methylnaphthalene	ND	0.00325		mg/Kg	1	10/11/2012 5:12:48 PM
2-Methylnaphthalene	ND	0.00325		mg/Kg	1	10/11/2012 5:12:48 PM
Acetone	0.0187	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromodichloromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromoform	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Bromomethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2-Butanone	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
Carbon tetrachloride	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Chlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Chloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:45:00 PM

Lab ID: 1210582-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Chloromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2-Chlorotoluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Carbon disulfide	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
4-Chlorotoluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
cis-1,2-DCE	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
cis-1,3-Dichloropropene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dibromo-3-chloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Dibromochloromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Dibromomethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,3-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,4-Dichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Dichlorodifluoromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1-Dichloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1-Dichloroethene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2-Dichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,3-Dichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2,2-Dichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1-Dichloropropene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Hexachlorobutadiene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Isopropylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
4-Isopropyltoluene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Methylene chloride	0.0173	0.00244		mg/Kg	1	10/11/2012 5:12:48 PM
n-Butylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
2-Hexanone	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
n-Propylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
sec-Butylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Styrene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
4-Methyl-2-pentanone	ND	0.00812		mg/Kg	1	10/11/2012 5:12:48 PM
tert-Butylbenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,1,2-Tetrachloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,2,2-Tetrachloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Tetrachloroethene (PCE)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
trans-1,2-DCE	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
trans-1,3-Dichloropropene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2,3-Trichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,2,4-Trichlorobenzene	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,1-Trichloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
1,1,2-Trichloroethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Trichloroethene (TCE)	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Trichlorofluoromethane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM

Qualifiers:

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:45:00 PM

Lab ID: 1210582-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Vinyl chloride	ND	0.000812		mg/Kg	1	10/11/2012 5:12:48 PM
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%REC	1	10/11/2012 5:12:48 PM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	1	10/11/2012 5:12:48 PM
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	10/11/2012 5:12:48 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/11/2012 5:12:48 PM

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E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (10-12')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:55:00 PM

Lab ID: 1210582-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	2200	96		mg/Kg	10	10/12/2012 12:25:01 PM
Motor Oil Range Organics (MRO)	ND	480		mg/Kg	10	10/12/2012 12:25:01 PM
Surr: DNOP	0	77.6-140	S	%REC	10	10/12/2012 12:25:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	220	50		mg/Kg	10	10/12/2012 12:44:56 PM
Surr: BFB	276	84-116	S	%REC	10	10/12/2012 12:44:56 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:03:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 5:50:19 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:50:19 PM
Barium	340	1.0		mg/Kg	10	10/17/2012 3:17:21 PM
Beryllium	0.83	0.75		mg/Kg	5	10/16/2012 5:50:19 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:50:19 PM
Chromium	9.1	1.5		mg/Kg	5	10/16/2012 5:50:19 PM
Cobalt	4.7	1.5		mg/Kg	5	10/16/2012 5:50:19 PM
Iron	13000	500		mg/Kg	500	10/17/2012 3:19:44 PM
Lead	4.5	1.2		mg/Kg	5	10/16/2012 5:50:19 PM
Manganese	340	1.0		mg/Kg	10	10/17/2012 3:17:21 PM
Nickel	7.6	2.5		mg/Kg	5	10/16/2012 5:50:19 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:46:48 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:50:19 PM
Vanadium	21	12		mg/Kg	5	10/16/2012 5:50:19 PM
Zinc	16	12		mg/Kg	5	10/16/2012 5:50:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Aniline	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Anthracene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Azobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM

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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (10-12')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:55:00 PM

Lab ID: 1210582-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Carbazole	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Chrysene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dimethylphenol	ND	0.59		mg/Kg	1	10/12/2012 8:20:33 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Fluorene	1.2	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Isophorone	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
1-Methylnaphthalene	12	2.0		mg/Kg	5	10/14/2012 2:09:29 PM
2-Methylnaphthalene	17	2.0		mg/Kg	5	10/14/2012 2:09:29 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Naphthalene	4.2	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (10-12')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:55:00 PM

Lab ID: 1210582-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/12/2012 8:20:33 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/12/2012 8:20:33 PM
Phenanthrene	2.6	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Phenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Pyrene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Pyridine	ND	0.99		mg/Kg	1	10/12/2012 8:20:33 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:20:33 PM
Surr: 2,4,6-Tribromophenol	57.6	21.3-145		%REC	1	10/12/2012 8:20:33 PM
Surr: 2-Fluorobiphenyl	66.5	20-131		%REC	1	10/12/2012 8:20:33 PM
Surr: 2-Fluorophenol	86.9	11.9-130		%REC	1	10/12/2012 8:20:33 PM
Surr: 4-Terphenyl-d14	77.1	25.1-149		%REC	1	10/12/2012 8:20:33 PM
Surr: Nitrobenzene-d5	0	25.6-137	S	%REC	1	10/12/2012 8:20:33 PM
Surr: Phenol-d5	84.7	20.3-132		%REC	1	10/12/2012 8:20:33 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	0.96	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Toluene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Ethylbenzene	7.5	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,4-Trimethylbenzene	13	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,3,5-Trimethylbenzene	4.2	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Naphthalene	9.1	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1-Methylnaphthalene	14	2.0		mg/Kg	10	10/19/2012 6:53:56 PM
2-Methylnaphthalene	25	2.0		mg/Kg	10	10/19/2012 6:53:56 PM
Acetone	ND	7.5		mg/Kg	10	10/19/2012 6:53:56 PM
Bromobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Bromoform	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Bromomethane	ND	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
2-Butanone	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Carbon disulfide	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Chlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Chloroethane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (10-12')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:55:00 PM

Lab ID: 1210582-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Chloromethane	ND	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Dibromomethane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
2-Hexanone	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Isopropylbenzene	1.7	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
4-Isopropyltoluene	0.57	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/19/2012 6:53:56 PM
Methylene chloride	ND	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
n-Butylbenzene	2.0	1.5		mg/Kg	10	10/19/2012 6:53:56 PM
n-Propylbenzene	3.3	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
sec-Butylbenzene	1.2	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Styrene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/19/2012 6:53:56 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (10-12')

Project: SWMU NO.14

Collection Date: 10/9/2012 1:55:00 PM

Lab ID: 1210582-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.50		mg/Kg	10	10/19/2012 6:53:56 PM
Xylenes, Total	12	1.0		mg/Kg	10	10/19/2012 6:53:56 PM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	10	10/19/2012 6:53:56 PM
Surr: 4-Bromofluorobenzene	71.0	70-130		%REC	10	10/19/2012 6:53:56 PM
Surr: Dibromofluoromethane	92.6	70-130		%REC	10	10/19/2012 6:53:56 PM
Surr: Toluene-d8	95.7	70-130		%REC	10	10/19/2012 6:53:56 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (17-18')

Project: SWMU NO.14

Collection Date: 10/9/2012 2:10:00 PM

Lab ID: 1210582-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/12/2012 9:02:54 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/12/2012 9:02:54 AM
Surr: DNOP	104	77.6-140		%REC	1	10/12/2012 9:02:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 6:59:20 PM
Surr: BFB	106	84-116		%REC	1	10/12/2012 6:59:20 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:08:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 5:55:27 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:55:27 PM
Barium	290	1.0		mg/Kg	10	10/17/2012 3:22:21 PM
Beryllium	0.87	0.75		mg/Kg	5	10/16/2012 5:55:27 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:55:27 PM
Chromium	8.9	1.5		mg/Kg	5	10/16/2012 5:55:27 PM
Cobalt	5.6	1.5		mg/Kg	5	10/16/2012 5:55:27 PM
Iron	16000	500		mg/Kg	500	10/17/2012 3:27:16 PM
Lead	2.9	1.2		mg/Kg	5	10/16/2012 5:55:27 PM
Manganese	1100	5.0		mg/Kg	50	10/17/2012 3:24:47 PM
Nickel	11	2.5		mg/Kg	5	10/16/2012 5:55:27 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:49:15 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:55:27 PM
Vanadium	ND	12		mg/Kg	5	10/16/2012 5:55:27 PM
Zinc	17	12		mg/Kg	5	10/16/2012 5:55:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (17-18')

Project: SWMU NO.14

Collection Date: 10/9/2012 2:10:00 PM

Lab ID: 1210582-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 8:49:51 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (17-18')

Project: SWMU NO.14

Collection Date: 10/9/2012 2:10:00 PM

Lab ID: 1210582-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 8:49:51 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:49:51 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 8:49:51 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:49:51 PM
Surr: 2,4,6-Tribromophenol	73.4	21.3-145		%REC	1	10/12/2012 8:49:51 PM
Surr: 2-Fluorobiphenyl	65.9	20-131		%REC	1	10/12/2012 8:49:51 PM
Surr: 2-Fluorophenol	66.9	11.9-130		%REC	1	10/12/2012 8:49:51 PM
Surr: 4-Terphenyl-d14	62.2	25.1-149		%REC	1	10/12/2012 8:49:51 PM
Surr: Nitrobenzene-d5	67.3	25.6-137		%REC	1	10/12/2012 8:49:51 PM
Surr: Phenol-d5	72.3	20.3-132		%REC	1	10/12/2012 8:49:51 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00909	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Toluene	0.00596	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Ethylbenzene	0.00134	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Xylenes, Total	0.00460	0.00216		mg/Kg	1	10/11/2012 5:43:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2,4-Trimethylbenzene	0.00148	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,3,5-Trimethylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dichloroethane (EDC)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dibromoethane (EDB)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Naphthalene	ND	0.00216		mg/Kg	1	10/11/2012 5:43:38 PM
1-Methylnaphthalene	ND	0.00432		mg/Kg	1	10/11/2012 5:43:38 PM
2-Methylnaphthalene	ND	0.00432		mg/Kg	1	10/11/2012 5:43:38 PM
Acetone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromodichloromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromoform	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Bromomethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2-Butanone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
Carbon tetrachloride	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Chlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Chloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (17-18')

Project: SWMU NO.14

Collection Date: 10/9/2012 2:10:00 PM

Lab ID: 1210582-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Chloromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2-Chlorotoluene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Carbon disulfide	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
4-Chlorotoluene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
cis-1,2-DCE	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
cis-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dibromo-3-chloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Dibromochloromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Dibromomethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,3-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,4-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Dichlorodifluoromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1-Dichloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1-Dichloroethene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,3-Dichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1-Dichloropropene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Hexachlorobutadiene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Isopropylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
4-Isopropyltoluene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Methylene chloride	0.0310	0.00324	E	mg/Kg	1	10/11/2012 5:43:38 PM
n-Butylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
2-Hexanone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
n-Propylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
sec-Butylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Styrene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
4-Methyl-2-pentanone	ND	0.0108		mg/Kg	1	10/11/2012 5:43:38 PM
tert-Butylbenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,1,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,2,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Tetrachloroethene (PCE)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
trans-1,2-DCE	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
trans-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2,3-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,2,4-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,1-Trichloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
1,1,2-Trichloroethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Trichloroethene (TCE)	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Trichlorofluoromethane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-6 (17-18')

Project: SWMU NO.14

Collection Date: 10/9/2012 2:10:00 PM

Lab ID: 1210582-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Vinyl chloride	ND	0.00108		mg/Kg	1	10/11/2012 5:43:38 PM
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	1	10/11/2012 5:43:38 PM
Surr: 4-Bromofluorobenzene	93.2	70-130		%REC	1	10/11/2012 5:43:38 PM
Surr: Dibromofluoromethane	98.9	70-130		%REC	1	10/11/2012 5:43:38 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	10/11/2012 5:43:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:35:00 PM

Lab ID: 1210582-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	21	10		mg/Kg	1	10/12/2012 2:15:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2012 2:15:12 PM
Surr: DNOP	101	77.6-140		%REC	1	10/12/2012 2:15:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 1:13:43 AM
Surr: BFB	113	84-116		%REC	1	10/13/2012 1:13:43 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:10:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 6:00:28 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 6:00:28 PM
Barium	470	1.0		mg/Kg	10	10/17/2012 3:29:50 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 6:00:28 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 6:00:28 PM
Chromium	5.7	1.5		mg/Kg	5	10/16/2012 6:00:28 PM
Cobalt	3.2	1.5		mg/Kg	5	10/16/2012 6:00:28 PM
Iron	11000	500		mg/Kg	500	10/17/2012 3:34:44 PM
Lead	10	1.2		mg/Kg	5	10/16/2012 6:00:28 PM
Manganese	550	5.0		mg/Kg	50	10/17/2012 3:32:16 PM
Nickel	4.3	2.5		mg/Kg	5	10/16/2012 6:00:28 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:51:43 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 6:00:28 PM
Vanadium	17	12		mg/Kg	5	10/16/2012 6:00:28 PM
Zinc	29	12		mg/Kg	5	10/16/2012 6:00:28 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:35:00 PM

Lab ID: 1210582-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:19:12 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:35:00 PM

Lab ID: 1210582-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:19:12 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:19:12 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 9:19:12 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:19:12 PM
Surr: 2,4,6-Tribromophenol	86.0	21.3-145		%REC	1	10/12/2012 9:19:12 PM
Surr: 2-Fluorobiphenyl	79.3	20-131		%REC	1	10/12/2012 9:19:12 PM
Surr: 2-Fluorophenol	77.5	11.9-130		%REC	1	10/12/2012 9:19:12 PM
Surr: 4-Terphenyl-d14	76.4	25.1-149		%REC	1	10/12/2012 9:19:12 PM
Surr: Nitrobenzene-d5	80.9	25.6-137		%REC	1	10/12/2012 9:19:12 PM
Surr: Phenol-d5	81.7	20.3-132		%REC	1	10/12/2012 9:19:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00192	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Toluene	0.00300	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Ethylbenzene	0.00194	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Xylenes, Total	0.0128	0.00161		mg/Kg	1	10/11/2012 6:14:26 PM
Methyl tert-butyl ether (MTBE)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2,4-Trimethylbenzene	0.00163	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,3,5-Trimethylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dichloroethane (EDC)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dibromoethane (EDB)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Naphthalene	ND	0.00161		mg/Kg	1	10/11/2012 6:14:26 PM
1-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/11/2012 6:14:26 PM
2-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/11/2012 6:14:26 PM
Acetone	0.627	0.00805	E	mg/Kg	1	10/11/2012 6:14:26 PM
Bromobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Bromodichloromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Bromoform	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Bromomethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2-Butanone	0.0217	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
Carbon tetrachloride	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Chlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Chloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:35:00 PM

Lab ID: 1210582-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Chloromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2-Chlorotoluene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Carbon disulfide	ND	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
4-Chlorotoluene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
cis-1,2-DCE	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
cis-1,3-Dichloropropene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dibromo-3-chloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Dibromochloromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Dibromomethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,3-Dichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,4-Dichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Dichlorodifluoromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1-Dichloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1-Dichloroethene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2-Dichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,3-Dichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2,2-Dichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1-Dichloropropene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Hexachlorobutadiene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Isopropylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
4-Isopropyltoluene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Methylene chloride	ND	0.00242		mg/Kg	1	10/11/2012 6:14:26 PM
n-Butylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
2-Hexanone	ND	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
n-Propylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
sec-Butylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Styrene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
4-Methyl-2-pentanone	ND	0.00805		mg/Kg	1	10/11/2012 6:14:26 PM
tert-Butylbenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,1,2-Tetrachloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,2,2-Tetrachloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Tetrachloroethene (PCE)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
trans-1,2-DCE	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
trans-1,3-Dichloropropene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2,3-Trichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,2,4-Trichlorobenzene	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,1-Trichloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
1,1,2-Trichloroethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Trichloroethene (TCE)	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Trichlorofluoromethane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:35:00 PM

Lab ID: 1210582-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Vinyl chloride	ND	0.000805		mg/Kg	1	10/11/2012 6:14:26 PM
Surr: 1,2-Dichloroethane-d4	90.8	70-130		%REC	1	10/11/2012 6:14:26 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/11/2012 6:14:26 PM
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	10/11/2012 6:14:26 PM
Surr: Toluene-d8	86.5	70-130		%REC	1	10/11/2012 6:14:26 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:45:00 PM

Lab ID: 1210582-006

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 9:24:29 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/12/2012 9:24:29 AM
Surr: DNOP	102	77.6-140		%REC	1	10/12/2012 9:24:29 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 1:42:26 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 1:42:26 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:12:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/23/2012 7:54:10 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 6:14:02 PM
Barium	750	5.0		mg/Kg	50	10/17/2012 3:52:04 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 6:14:02 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 6:14:02 PM
Chromium	7.4	1.5		mg/Kg	5	10/16/2012 6:14:02 PM
Cobalt	3.9	1.5		mg/Kg	5	10/16/2012 6:14:02 PM
Iron	12000	500		mg/Kg	500	10/17/2012 3:54:29 PM
Lead	5.0	1.2		mg/Kg	5	10/16/2012 6:14:02 PM
Manganese	550	5.0		mg/Kg	50	10/17/2012 3:52:04 PM
Nickel	6.1	2.5		mg/Kg	5	10/16/2012 6:14:02 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:54:10 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 6:14:02 PM
Vanadium	16	12		mg/Kg	5	10/16/2012 6:14:02 PM
Zinc	22	12		mg/Kg	5	10/16/2012 6:14:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:45:00 PM

Lab ID: 1210582-006

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:48:27 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:45:00 PM

Lab ID: 1210582-006

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:48:27 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:48:27 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 9:48:27 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:48:27 PM
Surr: 2,4,6-Tribromophenol	68.3	21.3-145		%REC	1	10/12/2012 9:48:27 PM
Surr: 2-Fluorobiphenyl	71.2	20-131		%REC	1	10/12/2012 9:48:27 PM
Surr: 2-Fluorophenol	64.8	11.9-130		%REC	1	10/12/2012 9:48:27 PM
Surr: 4-Terphenyl-d14	63.8	25.1-149		%REC	1	10/12/2012 9:48:27 PM
Surr: Nitrobenzene-d5	68.6	25.6-137		%REC	1	10/12/2012 9:48:27 PM
Surr: Phenol-d5	70.9	20.3-132		%REC	1	10/12/2012 9:48:27 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00145	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Toluene	0.00126	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Xylenes, Total	ND	0.00207		mg/Kg	1	10/11/2012 6:45:11 PM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Naphthalene	ND	0.00207		mg/Kg	1	10/11/2012 6:45:11 PM
1-Methylnaphthalene	ND	0.00415		mg/Kg	1	10/11/2012 6:45:11 PM
2-Methylnaphthalene	ND	0.00415		mg/Kg	1	10/11/2012 6:45:11 PM
Acetone	0.0315	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromoform	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:45:00 PM

Lab ID: 1210582-006

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Methylene chloride	0.0142	0.00311		mg/Kg	1	10/11/2012 6:45:11 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Styrene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/11/2012 6:45:11 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/9/2012 3:45:00 PM

Lab ID: 1210582-006

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/11/2012 6:45:11 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/11/2012 6:45:11 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1	10/11/2012 6:45:11 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/11/2012 6:45:11 PM
Surr: Toluene-d8	97.9	70-130		%REC	1	10/11/2012 6:45:11 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (8-10')

Project: SWMU NO.14

Collection Date: 10/9/2012 4:00:00 PM

Lab ID: 1210582-007

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 9:46:10 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2012 9:46:10 AM
Surr: DNOP	104	77.6-140		%REC	1	10/12/2012 9:46:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 2:11:08 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 2:11:08 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:21:15 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/23/2012 7:56:35 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 6:18:57 PM
Barium	160	0.50		mg/Kg	5	10/16/2012 6:18:57 PM
Beryllium	0.91	0.75		mg/Kg	5	10/16/2012 6:18:57 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 6:18:57 PM
Chromium	8.0	1.5		mg/Kg	5	10/16/2012 6:18:57 PM
Cobalt	4.3	1.5		mg/Kg	5	10/16/2012 6:18:57 PM
Iron	12000	500		mg/Kg	500	10/17/2012 3:57:07 PM
Lead	4.7	1.2		mg/Kg	5	10/16/2012 6:18:57 PM
Manganese	220	0.50		mg/Kg	5	10/16/2012 6:18:57 PM
Nickel	7.3	2.5		mg/Kg	5	10/16/2012 6:18:57 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:56:35 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 6:18:57 PM
Vanadium	14	12		mg/Kg	5	10/16/2012 6:18:57 PM
Zinc	13	12		mg/Kg	5	10/16/2012 6:18:57 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (8-10')

Project: SWMU NO.14

Collection Date: 10/9/2012 4:00:00 PM

Lab ID: 1210582-007

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 10:17:34 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (8-10')

Project: SWMU NO.14

Collection Date: 10/9/2012 4:00:00 PM

Lab ID: 1210582-007

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 10:17:34 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:17:34 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 10:17:34 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:17:34 PM
Surr: 2,4,6-Tribromophenol	86.4	21.3-145		%REC	1	10/12/2012 10:17:34 PM
Surr: 2-Fluorobiphenyl	75.8	20-131		%REC	1	10/12/2012 10:17:34 PM
Surr: 2-Fluorophenol	78.0	11.9-130		%REC	1	10/12/2012 10:17:34 PM
Surr: 4-Terphenyl-d14	69.7	25.1-149		%REC	1	10/12/2012 10:17:34 PM
Surr: Nitrobenzene-d5	81.3	25.6-137		%REC	1	10/12/2012 10:17:34 PM
Surr: Phenol-d5	84.8	20.3-132		%REC	1	10/12/2012 10:17:34 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Toluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Ethylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Xylenes, Total	ND	0.00186		mg/Kg	1	10/11/2012 7:15:55 PM
Methyl tert-butyl ether (MTBE)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2,4-Trimethylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,3,5-Trimethylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dichloroethane (EDC)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dibromoethane (EDB)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Naphthalene	ND	0.00186		mg/Kg	1	10/11/2012 7:15:55 PM
1-Methylnaphthalene	ND	0.00373		mg/Kg	1	10/11/2012 7:15:55 PM
2-Methylnaphthalene	ND	0.00373		mg/Kg	1	10/11/2012 7:15:55 PM
Acetone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromodichloromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromoform	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Bromomethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2-Butanone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
Carbon tetrachloride	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Chlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Chloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (8-10')

Project: SWMU NO.14

Collection Date: 10/9/2012 4:00:00 PM

Lab ID: 1210582-007

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Chloromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2-Chlorotoluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Carbon disulfide	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
4-Chlorotoluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
cis-1,2-DCE	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
cis-1,3-Dichloropropene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dibromo-3-chloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Dibromochloromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Dibromomethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,3-Dichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,4-Dichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Dichlorodifluoromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1-Dichloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1-Dichloroethene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2-Dichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,3-Dichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2,2-Dichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1-Dichloropropene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Hexachlorobutadiene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Isopropylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
4-Isopropyltoluene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Methylene chloride	0.00978	0.00279		mg/Kg	1	10/11/2012 7:15:55 PM
n-Butylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
2-Hexanone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
n-Propylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
sec-Butylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Styrene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
4-Methyl-2-pentanone	ND	0.00932		mg/Kg	1	10/11/2012 7:15:55 PM
tert-Butylbenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,1,2-Tetrachloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,2,2-Tetrachloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Tetrachloroethene (PCE)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
trans-1,2-DCE	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
trans-1,3-Dichloropropene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2,3-Trichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,2,4-Trichlorobenzene	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,1-Trichloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
1,1,2-Trichloroethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Trichloroethene (TCE)	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Trichlorofluoromethane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210582

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-21 (8-10')

Project: SWMU NO.14

Collection Date: 10/9/2012 4:00:00 PM

Lab ID: 1210582-007

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Vinyl chloride	ND	0.000932		mg/Kg	1	10/11/2012 7:15:55 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	1	10/11/2012 7:15:55 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	1	10/11/2012 7:15:55 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/11/2012 7:15:55 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	10/11/2012 7:15:55 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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

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

Batch #: 121012039
Project Name: 1210582

Analytical Results Report

Sample Number	121012039-001	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM		
Client Sample ID	1210582-001D / SWMU 14-6 (0-0.5)			Sampling Time	1:35 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	4	Percent		10/26/2012	CRW	%moisture	

Sample Number	121012039-002	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM		
Client Sample ID	1210582-002D / SWMU 14-6 (1.5-2)			Sampling Time	1:45 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	10.1	Percent		10/26/2012	CRW	%moisture	

Sample Number	121012039-003	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM		
Client Sample ID	1210582-003D / SWMU 14-6 (10-12)			Sampling Time	1:55 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	16.8	Percent		10/26/2012	CRW	%moisture	

Sample Number	121012039-004	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM		
Client Sample ID	1210582-004D / SWMU 14-6 (17-18)			Sampling Time	2:10 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	14.2	Percent		10/26/2012	CRW	%moisture	

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 #: 121012039
Project Name: 1210582

Analytical Results Report

Sample Number	121012039-005	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM
Client Sample ID	1210582-005D / SWMU 14-21 (0-0.5)			Sampling Time	3:35 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	1.3	Percent		10/26/2012	CRW	%moisture	

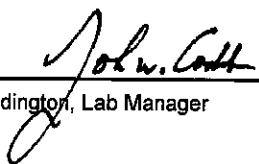
Sample Number	121012039-006	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM
Client Sample ID	1210582-006D / SWMU 14-21 (1.5-2)			Sampling Time	3:45 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	10	Percent		10/26/2012	CRW	%moisture	

Sample Number	121012039-007	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:17 PM
Client Sample ID	1210582-007D / SWMU 14-21 (8-10)			Sampling Time	4:00 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	19.4	Percent		10/26/2012	CRW	%moisture	

Authorized Signature


John Coddington, Lab Manager

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

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Friday, October 26, 2012

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4254	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4254			RunNo: 6180					
Prep Date:	10/11/2012	Analysis Date: 10/12/2012			SeqNo: 178120		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		103	77.6	140			

Sample ID	LCS-4254		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4254		RunNo: 6180					
Prep Date:	10/11/2012		Analysis Date: 10/12/2012		SeqNo: 178205		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	84.4	52.6	130			
Surr: DNOP	4.4		5.000		88.5	77.6	140			

Sample ID	1210582-001CMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 14-6 (0-0.5')	Batch ID:	4254	RunNo:	6180					
Prep Date:	10/11/2012	Analysis Date:	10/12/2012	SeqNo:	178471	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.60	0	115	57.2	146			
Surr: DNOP	3.3		4.960		65.9	77.6	140			S

Sample ID	1210582-001CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 14-6 (0-0.5')		Batch ID: 4254		RunNo: 6180					
Prep Date:	10/11/2012		Analysis Date: 10/12/2012		SeqNo: 178474		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.9	49.26	0	123	57.2	146	6.62	24.5	
Surr: DNOP	3.5		4.926		71.7	77.6	140	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178737		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		103	84	116			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178738		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID	1210582-004BMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	SWMU 14-6 (17-18')		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178751		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.2	5.0	18.26	0	39.3	70	130			S
Surr: BFB	780		730.5		107	84	116			

Sample ID	1210582-004BMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	SWMU 14-6 (17-18')		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178752		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	18.26	0	87.4	70	130	76.0	22.1	R
Surr: BFB	800		730.5		109	84	116	0	0	

Sample ID	B27		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178761		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	1100		1000		105	84	116			

Sample ID	2.5UG GRO LCS-II		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 178762		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		112	84	116			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210653-005BMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6205	RunNo:	6205					
Prep Date:		Analysis Date:	10/12/2012	SeqNo:	178768	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	1100		1000		113	84	116			

Sample ID	1210653-005BMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6205	RunNo:	6205					
Prep Date:		Analysis Date:	10/12/2012	SeqNo:	178769	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	70	130	7.96	22.1	
Surr: BFB	1200		1000		117	84	116	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b2	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R6394	RunNo:	6394					
Prep Date:		Analysis Date:	10/19/2012	SeqNo:	184052	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								
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	0.10								
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	0.10								
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	0.10								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b2	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184052		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID 100ng lcsc	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSS	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184056		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	114	70	130			
Toluene	1.0	0.050	1.000	0	102	80	120			
Chlorobenzene	1.0	0.050	1.000	0	100	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	108	74	124			
Trichloroethene (TCE)	0.95	0.050	1.000	0	94.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcsc		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: R6394		RunNo: 6394					
Prep Date:			Analysis Date: 10/19/2012		SeqNo: 184056		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID	1210582-003bms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	SWMU 14-6 (10-12')	Batch ID: R6394			RunNo: 6394					
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184057		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.0	0.50	5.641	0.9563	108	80.9	118			
Toluene	5.9	0.50	5.641	0.06927	104	69.5	119			
Chlorobenzene	5.8	0.50	5.641	0	104	75.7	115			
1,1-Dichloroethene	5.8	0.50	5.641	0	103	68.6	126			
Trichloroethene (TCE)	5.2	0.50	5.641	0	92.0	68.7	115			
Surr: 1,2-Dichloroethane-d4	2.7		2.820		95.2	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.820		73.3	70	130			
Surr: Dibromofluoromethane	2.7		2.820		95.5	70	130			
Surr: Toluene-d8	2.7		2.820		95.6	70	130			

Sample ID	1210582-003bmsd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	SWMU 14-6 (10-12')		Batch ID: R6394		RunNo: 6394					
Prep Date:			Analysis Date: 10/19/2012		SeqNo: 184058		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.1	0.50	5.641	0.9563	109	80.9	118	0.812	20	
Toluene	5.7	0.50	5.641	0.06927	100	69.5	119	3.36	20	
Chlorobenzene	5.7	0.50	5.641	0	101	75.7	115	2.30	20	
1,1-Dichloroethene	5.6	0.50	5.641	0	99.4	68.6	126	3.18	24.8	
Trichloroethene (TCE)	5.2	0.50	5.641	0	91.9	68.7	115	0.0761	20	
Surr: 1,2-Dichloroethane-d4	2.8		2.820		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.820		69.9	70	130	0	0	S
Surr: Dibromofluoromethane	2.7		2.820		95.4	70	130	0	0	
Surr: Toluene-d8	2.6		2.820		93.2	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4251		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 178168		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4251		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 178168		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.4		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	44.5		50.00		89.0	70	130			
Surr: Dibromofluoromethane	45.4		50.00		90.9	70	130			
Surr: Toluene-d8	43.9		50.00		87.8	70	130			

Sample ID	lcs-4251		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 180403		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.63	1.00	10.00	0	96.3	60	140			
Toluene	9.93	1.00	10.00	0	99.3	60	140			
Chlorobenzene	10.3	1.00	10.00	0	103	60	140			
1,1-Dichloroethene	11.1	1.00	10.00	0	111	60	140			
Trichloroethene (TCE)	8.17	1.00	10.00	0	81.7	60	140			
Surr: 1,2-Dichloroethane-d4	45.2		50.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	lcs-4251		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 180403		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.5	70	130			
Surr: Toluene-d8	49.1		50.00		98.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4255	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4255	RunNo:	6206					
Prep Date:	10/11/2012	Analysis Date:	10/12/2012	SeqNo:	178793	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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4255		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4255			RunNo: 6206				
Prep Date:	10/11/2012		Analysis Date: 10/12/2012			SeqNo: 178793		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		96.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		90.7	20	131			
Surr: 2-Fluorophenol	3.0		3.330		91.3	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.4	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.7	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.4	20.3	132			

Sample ID	lcs-4255		SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSS		Batch ID: 4255			RunNo: 6206				
Prep Date:	10/11/2012		Analysis Date: 10/12/2012			SeqNo: 178794		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-4255	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 4255			RunNo: 6206					
Prep Date:	10/11/2012	Analysis Date: 10/12/2012			SeqNo: 178794		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	73.9	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	80.8	43.8	89.1			
2-Chlorophenol	2.2	0.20	3.330	0	67.4	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	67.6	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.6	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	81.4	39.1	86.9			
4-Nitrophenol	2.6	0.25	3.330	0	77.3	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.9	36.2	80			
Phenol	2.4	0.20	3.330	0	72.3	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	71.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.3	20	131			
Surr: 2-Fluorophenol	2.2		3.330		66.5	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.0	25.1	149			
Surr: Nitrobenzene-d5	1.3		1.670		77.6	25.6	137			
Surr: Phenol-d5	2.6		3.330		77.6	20.3	132			

Sample ID	1210582-001Cms		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 14-6 (0-0.5')		Batch ID: 4255		RunNo: 6206					
Prep Date:	10/11/2012		Analysis Date: 10/12/2012		SeqNo: 178807		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.91	0.40	1.667	0.1738	44.2	38.6	100			
4-Chloro-3-methylphenol	1.9	1.0	3.324	0	55.7	35.8	108			
2-Chlorophenol	1.7	0.40	3.324	0	51.8	48.2	96.1			
1,4-Dichlorobenzene	0.85	0.40	1.667	0	51.1	42.5	97.6			
2,4-Dinitrotoluene	ND	1.0	1.667	0	42.5	51.2	108			S
N-Nitrosodi-n-propylamine	1.0	0.40	1.667	0	61.2	31.6	114			
4-Nitrophenol	1.9	0.50	3.324	0	58.2	22.7	144			
Pentachlorophenol	1.5	0.80	3.324	0	46.2	24	109			
Phenol	1.8	0.40	3.324	0	54.0	33.1	108			
Pyrene	0.90	0.40	1.667	0	53.9	42.7	98.9			
1,2,4-Trichlorobenzene	0.85	0.40	1.667	0	50.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.0		3.324		59.6	21.3	145			
Surr: 2-Fluorobiphenyl	0.91		1.667		54.4	20	131			
Surr: 2-Fluorophenol	1.8		3.324		53.2	11.9	130			
Surr: 4-Terphenyl-d14	0.85		1.667		51.2	25.1	149			
Surr: Nitrobenzene-d5	0.89		1.667		53.3	25.6	137			
Surr: Phenol-d5	2.1		3.324		62.2	20.3	132			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210582-001Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 14-6 (0-0.5')	Batch ID:	4255	RunNo:	6206					
Prep Date:	10/11/2012	Analysis Date:	10/12/2012	SeqNo:	178808	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.76	0.40	1.660	0.1738	35.2	38.6	100	18.3	20	S
4-Chloro-3-methylphenol	1.6	0.99	3.310	0	47.7	35.8	108	15.8	20	
2-Chlorophenol	1.5	0.40	3.310	0	44.1	48.2	96.1	16.5	20	S
1,4-Dichlorobenzene	0.67	0.40	1.660	0	40.4	42.5	97.6	23.7	20	SR
2,4-Dinitrotoluene	ND	0.99	1.660	0	33.7	51.2	108	0	20	SR
N-Nitrosodi-n-propylamine	0.77	0.40	1.660	0	46.3	31.6	114	28.0	20	R
4-Nitrophenol	1.6	0.50	3.310	0	48.0	22.7	144	19.5	20	
Pentachlorophenol	1.3	0.80	3.310	0	38.4	24	109	19.0	20	
Phenol	1.4	0.40	3.310	0	43.3	33.1	108	22.5	20	R
Pyrene	0.74	0.40	1.660	0	44.7	42.7	98.9	19.0	20	
1,2,4-Trichlorobenzene	0.69	0.40	1.660	0	41.5	27.1	118	20.3	20	R
Surr: 2,4,6-Tribromophenol	1.6		3.310		48.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	0.72		1.660		43.6	20	131	0	0	
Surr: 2-Fluorophenol	1.5		3.310		44.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	0.68		1.660		41.2	25.1	149	0	0	
Surr: Nitrobenzene-d5	0.71		1.660		42.8	25.6	137	0	0	
Surr: Phenol-d5	1.6		3.310		47.6	20.3	132	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4314		SampType: mblk		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4314		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180677		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4314		SampType: lcs		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4314		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180678		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	100	80	120			

Sample ID	1210582-006CMS		SampType: ms		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 14-21 (1.5-2')		Batch ID: 4314		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180706		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1669	0.01973	92.8	75	125			

Sample ID	1210582-006CMSD		SampType: msd		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 14-21 (1.5-2')		Batch ID: 4314		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180707		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1660	0.01973	95.3	75	125	1.94	20	

Sample ID	MB-4317		SampType: mblk		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180708		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-4317		SampType: Ics		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180709		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID	1210656-004CMS		SampType: ms		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180735		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210656-004CMSD	SampType:	msd	TestCode:	EPA Method 7471: Mercury					
Client ID:	BatchQC	Batch ID:	4317	RunNo:	6270					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	180736	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4298	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4298	RunNo:	6281					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	180997	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								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4298	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4298	RunNo:	6281					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181002	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	22	2.5	25.00	0	86.4	80	120			
Arsenic	26	2.5	25.00	0	105	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	104	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	98.3	80	120			
Cobalt	24	0.30	25.00	0	98.0	80	120			
Lead	25	0.25	25.00	0	102	80	120			
Manganese	24	0.10	25.00	0.03550	97.1	80	120			
Nickel	24	0.50	25.00	0	97.2	80	120			
Selenium	25	2.5	25.00	0	101	80	120			
Silver	5.1	0.25	5.000	0.06650	100	80	120			
Vanadium	25	2.5	25.00	0	100	80	120			
Zinc	25	2.5	25.00	0	101	80	120			

Sample ID	1210521-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4298	RunNo:	6281					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181043	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.89	0	0	75	125			S
Arsenic	23	12	24.89	0	90.6	75	125			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210582

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210521-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals						
Client ID:	BatchQC	Batch ID:	4298	RunNo:	6281						
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181043	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Beryllium	25	0.75	24.89	0.6775	98.5	75	125				
Cadmium	23	0.50	24.89	0	92.7	75	125				
Chromium	38	1.5	24.89	9.549	114	75	125				
Cobalt	28	1.5	24.89	5.096	90.8	75	125				
Lead	29	1.2	24.89	9.267	80.3	75	125				
Nickel	35	2.5	24.89	8.978	106	75	125				
Selenium	22	12	24.89	0	89.0	75	125				
Silver	4.5	1.2	4.978	0	90.5	75	125				
Vanadium	48	12	24.89	23.50	97.8	75	125				
Zinc	64	12	24.89	33.89	120	75	125				

Sample ID	1210521-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals						
Client ID:	BatchQC	Batch ID:	4298	RunNo:	6281						
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181046	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Antimony	ND	12	24.80	0	0	75	125	0	20	S	
Arsenic	22	12	24.80	0	88.1	75	125	3.10	20		
Beryllium	25	0.75	24.80	0.6775	97.4	75	125	1.43	20		
Cadmium	23	0.50	24.80	0	91.2	75	125	1.97	20		
Chromium	33	1.5	24.80	9.549	93.6	75	125	14.6	20		
Cobalt	26	1.5	24.80	5.096	84.8	75	125	5.79	20		
Lead	30	1.2	24.80	9.267	81.9	75	125	1.10	20		
Nickel	30	2.5	24.80	8.978	86.2	75	125	15.4	20		
Selenium	ND	12	24.80	0	0	75	125	200	20	SR	
Silver	4.5	1.2	4.960	0	91.3	75	125	0.532	20		
Vanadium	50	12	24.80	23.50	108	75	125	5.11	20		
Zinc	54	12	24.80	33.89	80.8	75	125	16.9	20		

Sample ID	MB-4298	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals						
Client ID:	PBS	Batch ID:	4298	RunNo:	6310						
Prep Date:	10/15/2012	Analysis Date:	10/17/2012	SeqNo:	181594	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Iron	ND	1.0									

Sample ID	LCS-4298	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals						
Client ID:	LCSS	Batch ID:	4298	RunNo:	6310						
Prep Date:	10/15/2012	Analysis Date:	10/17/2012	SeqNo:	181595	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Iron	26	1.0	25.00	0	106	80	120				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Sample Log-In Check List

Client Name: Western Refining Gallup		Work Order Number: 1210582
Received by/date: <u>mg</u> <u>10/11/12</u>		
Logged By: Michelle Garcia	10/11/2012 8:00:00 AM	<i>Michelle Garcia</i>
Completed By: Michelle Garcia	10/11/2012 8:31:36 AM	<i>Michelle Garcia</i>
Reviewed By: <u>[Signature]</u> <u>10/11/12</u>		

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. 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)

17. 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: _____	

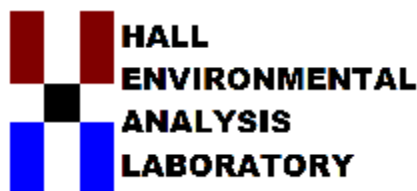
18. Additional remarks:

19. Cooler Information

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☒	A	Antimony	mg/Kg		0.629	0	
☒	A	Arsenic	mg/Kg		0.6263	0	
☒	A	Barium	mg/Kg		0.0609	0	
☒	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☒	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☒	A	Chromium	mg/Kg		0.1184	0	
☒	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☒	A	Iron	mg/Kg		0.7476	0	
☒	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☒	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☒	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☒	A	Selenium	mg/Kg		1.4025	0	
☒	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☒	A	Vanadium	mg/Kg		0.0565	0	
☒	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cu



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

November 12, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU No.14

OrderNo.: 1210583

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/11/2012 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. 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. 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.

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 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (0-0.5')

Project: SWMU No.14

Collection Date: 10/9/2012 4:45:00 PM

Lab ID: 1210583-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	150	10		mg/Kg	1	10/12/2012 1:51:40 PM
Motor Oil Range Organics (MRO)	96	50		mg/Kg	1	10/12/2012 1:51:40 PM
Surr: DNOP	91.5	77.6-140		%REC	1	10/12/2012 1:51:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 2:39:53 AM
Surr: BFB	106	84-116		%REC	1	10/13/2012 2:39:53 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.083	0.033		mg/kg	1	10/16/2012 5:23:03 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/23/2012 7:59:00 PM
Arsenic	ND	12		mg/Kg	5	10/23/2012 7:59:00 PM
Barium	630	2.0		mg/Kg	20	10/23/2012 8:18:50 PM
Beryllium	0.90	0.75		mg/Kg	5	10/17/2012 2:07:35 PM
Cadmium	ND	0.50		mg/Kg	5	10/17/2012 2:07:35 PM
Chromium	12	1.5		mg/Kg	5	10/17/2012 2:07:35 PM
Cobalt	5.5	1.5		mg/Kg	5	10/17/2012 2:07:35 PM
Iron	15000	500		mg/Kg	500	10/17/2012 2:19:56 PM
Lead	5.9	1.2		mg/Kg	5	10/17/2012 2:07:35 PM
Manganese	550	2.0		mg/Kg	20	10/23/2012 8:18:50 PM
Nickel	8.3	2.5		mg/Kg	5	10/17/2012 2:07:35 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 7:59:00 PM
Silver	ND	1.2		mg/Kg	5	10/17/2012 2:07:35 PM
Vanadium	25	12		mg/Kg	5	10/17/2012 2:07:35 PM
Zinc	33	12		mg/Kg	5	10/17/2012 2:07:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
Benzyl alcohol	0.26	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (0-0.5')

Project: SWMU No.14

Collection Date: 10/9/2012 4:45:00 PM

Lab ID: 1210583-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 10:46:37 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (0-0.5')

Project: SWMU No.14

Collection Date: 10/9/2012 4:45:00 PM

Lab ID: 1210583-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 10:46:37 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 10:46:37 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 10:46:37 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 10:46:37 PM
Surr: 2,4,6-Tribromophenol	80.5	21.3-145		%REC	1	10/12/2012 10:46:37 PM
Surr: 2-Fluorobiphenyl	76.4	20-131		%REC	1	10/12/2012 10:46:37 PM
Surr: 2-Fluorophenol	72.4	11.9-130		%REC	1	10/12/2012 10:46:37 PM
Surr: 4-Terphenyl-d14	72.9	25.1-149		%REC	1	10/12/2012 10:46:37 PM
Surr: Nitrobenzene-d5	72.7	25.6-137		%REC	1	10/12/2012 10:46:37 PM
Surr: Phenol-d5	79.2	20.3-132		%REC	1	10/12/2012 10:46:37 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00124	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Toluene	0.00318	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Ethylbenzene	0.00152	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Xylenes, Total	0.00894	0.00189		mg/Kg	1	10/11/2012 7:46:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2,4-Trimethylbenzene	0.00263	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,3,5-Trimethylbenzene	0.000983	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dichloroethane (EDC)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dibromoethane (EDB)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Naphthalene	ND	0.00189		mg/Kg	1	10/11/2012 7:46:38 PM
1-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/11/2012 7:46:38 PM
2-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/11/2012 7:46:38 PM
Acetone	0.480	0.00946	E	mg/Kg	1	10/11/2012 7:46:38 PM
Bromobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Bromodichloromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Bromoform	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Bromomethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2-Butanone	0.0165	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
Carbon tetrachloride	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Chlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Chloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (0-0.5')

Project: SWMU No.14

Collection Date: 10/9/2012 4:45:00 PM

Lab ID: 1210583-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Chloromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2-Chlorotoluene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Carbon disulfide	ND	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
4-Chlorotoluene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
cis-1,2-DCE	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
cis-1,3-Dichloropropene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dibromo-3-chloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Dibromochloromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Dibromomethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,3-Dichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,4-Dichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Dichlorodifluoromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1-Dichloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1-Dichloroethene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2-Dichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,3-Dichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2,2-Dichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1-Dichloropropene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Hexachlorobutadiene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Isopropylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
4-Isopropyltoluene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Methylene chloride	0.00694	0.00284		mg/Kg	1	10/11/2012 7:46:38 PM
n-Butylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
2-Hexanone	ND	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
n-Propylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
sec-Butylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Styrene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
4-Methyl-2-pentanone	ND	0.00946		mg/Kg	1	10/11/2012 7:46:38 PM
tert-Butylbenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,1,2-Tetrachloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,2,2-Tetrachloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Tetrachloroethene (PCE)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
trans-1,2-DCE	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
trans-1,3-Dichloropropene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2,3-Trichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,2,4-Trichlorobenzene	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,1-Trichloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
1,1,2-Trichloroethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Trichloroethene (TCE)	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Trichlorofluoromethane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (0-0.5')

Project: SWMU No.14

Collection Date: 10/9/2012 4:45:00 PM

Lab ID: 1210583-001

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Vinyl chloride	ND	0.000946		mg/Kg	1	10/11/2012 7:46:38 PM
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	10/11/2012 7:46:38 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	10/11/2012 7:46:38 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/11/2012 7:46:38 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/11/2012 7:46:38 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (1.5-2')

Project: SWMU No.14

Collection Date: 10/9/2012 4:55:00 PM

Lab ID: 1210583-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	90	9.9		mg/Kg	1	10/12/2012 2:58:30 PM
Motor Oil Range Organics (MRO)	60	49		mg/Kg	1	10/12/2012 2:58:30 PM
Surr: DNOP	107	77.6-140		%REC	1	10/12/2012 2:58:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 3:08:37 AM
Surr: BFB	106	84-116		%REC	1	10/13/2012 3:08:37 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.050	0.033		mg/kg	1	10/16/2012 5:24:51 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:21:15 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:11:16 PM
Barium	430	1.0		mg/Kg	10	10/17/2012 2:22:31 PM
Beryllium	0.83	0.30		mg/Kg	2	10/17/2012 12:11:16 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:11:16 PM
Chromium	10	0.60		mg/Kg	2	10/17/2012 12:11:16 PM
Cobalt	4.2	0.60		mg/Kg	2	10/17/2012 12:11:16 PM
Iron	14000	500		mg/Kg	500	10/17/2012 2:24:56 PM
Lead	4.3	0.50		mg/Kg	2	10/17/2012 12:11:16 PM
Manganese	540	2.0		mg/Kg	20	10/23/2012 8:23:45 PM
Nickel	7.2	1.0		mg/Kg	2	10/17/2012 12:11:16 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:21:15 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:11:16 PM
Vanadium	17	5.0		mg/Kg	2	10/17/2012 12:11:16 PM
Zinc	20	5.0		mg/Kg	2	10/17/2012 12:11:16 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (1.5-2')

Project: SWMU No.14

Collection Date: 10/9/2012 4:55:00 PM

Lab ID: 1210583-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 11:15:41 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Isophorone	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (1.5-2')

Project: SWMU No.14

Collection Date: 10/9/2012 4:55:00 PM

Lab ID: 1210583-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 11:15:41 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:15:41 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Pyridine	ND	0.49		mg/Kg	1	10/12/2012 11:15:41 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:15:41 PM
Surr: 2,4,6-Tribromophenol	82.2	21.3-145		%REC	1	10/12/2012 11:15:41 PM
Surr: 2-Fluorobiphenyl	77.8	20-131		%REC	1	10/12/2012 11:15:41 PM
Surr: 2-Fluorophenol	66.2	11.9-130		%REC	1	10/12/2012 11:15:41 PM
Surr: 4-Terphenyl-d14	68.0	25.1-149		%REC	1	10/12/2012 11:15:41 PM
Surr: Nitrobenzene-d5	78.3	25.6-137		%REC	1	10/12/2012 11:15:41 PM
Surr: Phenol-d5	76.2	20.3-132		%REC	1	10/12/2012 11:15:41 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.000971	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Toluene	0.00135	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Ethylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Xylenes, Total	ND	0.00178		mg/Kg	1	10/11/2012 8:17:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2,4-Trimethylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,3,5-Trimethylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dichloroethane (EDC)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dibromoethane (EDB)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Naphthalene	ND	0.00178		mg/Kg	1	10/11/2012 8:17:30 PM
1-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/11/2012 8:17:30 PM
2-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/11/2012 8:17:30 PM
Acetone	0.0505	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromodichloromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromoform	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Bromomethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2-Butanone	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
Carbon tetrachloride	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Chlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Chloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (1.5-2')

Project: SWMU No.14

Collection Date: 10/9/2012 4:55:00 PM

Lab ID: 1210583-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Chloromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2-Chlorotoluene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Carbon disulfide	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
4-Chlorotoluene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
cis-1,2-DCE	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
cis-1,3-Dichloropropene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Dibromochloromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Dibromomethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,3-Dichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,4-Dichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Dichlorodifluoromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1-Dichloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1-Dichloroethene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2-Dichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,3-Dichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2,2-Dichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1-Dichloropropene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Hexachlorobutadiene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Isopropylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
4-Isopropyltoluene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Methylene chloride	ND	0.00267		mg/Kg	1	10/11/2012 8:17:30 PM
n-Butylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
2-Hexanone	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
n-Propylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
sec-Butylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Styrene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
4-Methyl-2-pentanone	ND	0.00891		mg/Kg	1	10/11/2012 8:17:30 PM
tert-Butylbenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Tetrachloroethene (PCE)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
trans-1,2-DCE	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
trans-1,3-Dichloropropene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2,3-Trichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,2,4-Trichlorobenzene	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,1-Trichloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
1,1,2-Trichloroethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Trichloroethene (TCE)	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Trichlorofluoromethane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (1.5-2')

Project: SWMU No.14

Collection Date: 10/9/2012 4:55:00 PM

Lab ID: 1210583-002

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Vinyl chloride	ND	0.000891		mg/Kg	1	10/11/2012 8:17:30 PM
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	1	10/11/2012 8:17:30 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	10/11/2012 8:17:30 PM
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	10/11/2012 8:17:30 PM
Surr: Toluene-d8	99.0	70-130		%REC	1	10/11/2012 8:17:30 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6')

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/12/2012 8:39:34 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/12/2012 8:39:34 AM
Surr: DNOP	96.9	77.6-140		%REC	1	10/12/2012 8:39:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 3:37:27 AM
Surr: BFB	107	84-116		%REC	1	10/13/2012 3:37:27 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:30:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:26:10 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:16:23 PM
Barium	170	0.50		mg/Kg	5	10/17/2012 2:39:25 PM
Beryllium	0.89	0.30		mg/Kg	2	10/17/2012 12:16:23 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:16:23 PM
Chromium	7.6	0.60		mg/Kg	2	10/17/2012 12:16:23 PM
Cobalt	4.3	0.60		mg/Kg	2	10/17/2012 12:16:23 PM
Iron	13000	500		mg/Kg	500	10/17/2012 2:44:12 PM
Lead	4.0	0.50		mg/Kg	2	10/17/2012 12:16:23 PM
Manganese	370	1.0		mg/Kg	10	10/17/2012 2:41:49 PM
Nickel	7.2	1.0		mg/Kg	2	10/17/2012 12:16:23 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:26:10 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:16:23 PM
Vanadium	13	5.0		mg/Kg	2	10/17/2012 12:16:23 PM
Zinc	13	5.0		mg/Kg	2	10/17/2012 12:16:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6')

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 11:44:43 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6')

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 11:44:43 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 11:44:43 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 11:44:43 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 11:44:43 PM
Surr: 2,4,6-Tribromophenol	77.8	21.3-145		%REC	1	10/12/2012 11:44:43 PM
Surr: 2-Fluorobiphenyl	73.9	20-131		%REC	1	10/12/2012 11:44:43 PM
Surr: 2-Fluorophenol	62.1	11.9-130		%REC	1	10/12/2012 11:44:43 PM
Surr: 4-Terphenyl-d14	64.9	25.1-149		%REC	1	10/12/2012 11:44:43 PM
Surr: Nitrobenzene-d5	71.5	25.6-137		%REC	1	10/12/2012 11:44:43 PM
Surr: Phenol-d5	70.3	20.3-132		%REC	1	10/12/2012 11:44:43 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00190	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Toluene	0.00162	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Ethylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Xylenes, Total	ND	0.00200		mg/Kg	1	10/11/2012 8:48:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2,4-Trimethylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,3,5-Trimethylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dichloroethane (EDC)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dibromoethane (EDB)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Naphthalene	ND	0.00200		mg/Kg	1	10/11/2012 8:48:22 PM
1-Methylnaphthalene	ND	0.00401		mg/Kg	1	10/11/2012 8:48:22 PM
2-Methylnaphthalene	ND	0.00401		mg/Kg	1	10/11/2012 8:48:22 PM
Acetone	0.0151	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromodichloromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromoform	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Bromomethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2-Butanone	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
Carbon tetrachloride	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Chlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Chloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6')

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Chloromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2-Chlorotoluene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Carbon disulfide	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
4-Chlorotoluene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
cis-1,2-DCE	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
cis-1,3-Dichloropropene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dibromo-3-chloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Dibromochloromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Dibromomethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,3-Dichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,4-Dichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Dichlorodifluoromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1-Dichloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1-Dichloroethene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2-Dichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,3-Dichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2,2-Dichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1-Dichloropropene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Hexachlorobutadiene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Isopropylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
4-Isopropyltoluene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Methylene chloride	ND	0.00301		mg/Kg	1	10/11/2012 8:48:22 PM
n-Butylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
2-Hexanone	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
n-Propylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
sec-Butylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Styrene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
4-Methyl-2-pentanone	ND	0.0100		mg/Kg	1	10/11/2012 8:48:22 PM
tert-Butylbenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,1,2-Tetrachloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,2,2-Tetrachloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Tetrachloroethene (PCE)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
trans-1,2-DCE	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
trans-1,3-Dichloropropene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2,3-Trichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,2,4-Trichlorobenzene	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,1-Trichloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
1,1,2-Trichloroethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Trichloroethene (TCE)	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Trichlorofluoromethane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6')

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-003

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Vinyl chloride	ND	0.00100		mg/Kg	1	10/11/2012 8:48:22 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	10/11/2012 8:48:22 PM
Surr: 4-Bromofluorobenzene	90.0	70-130		%REC	1	10/11/2012 8:48:22 PM
Surr: Dibromofluoromethane	87.8	70-130		%REC	1	10/11/2012 8:48:22 PM
Surr: Toluene-d8	99.0	70-130		%REC	1	10/11/2012 8:48:22 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6') DUP

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/12/2012 9:04:32 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2012 9:04:32 AM
Surr: DNOP	96.1	77.6-140		%REC	1	10/12/2012 9:04:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 4:06:18 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 4:06:18 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:31:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:28:35 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:21:23 PM
Barium	170	0.50		mg/Kg	5	10/17/2012 2:46:48 PM
Beryllium	0.84	0.30		mg/Kg	2	10/17/2012 12:21:23 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:21:23 PM
Chromium	6.8	0.60		mg/Kg	2	10/17/2012 12:21:23 PM
Cobalt	3.9	0.60		mg/Kg	2	10/17/2012 12:21:23 PM
Iron	12000	500		mg/Kg	500	10/17/2012 2:49:14 PM
Lead	4.2	0.50		mg/Kg	2	10/17/2012 12:21:23 PM
Manganese	230	0.50		mg/Kg	5	10/17/2012 2:46:48 PM
Nickel	6.5	1.0		mg/Kg	2	10/17/2012 12:21:23 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:28:35 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:21:23 PM
Vanadium	12	5.0		mg/Kg	2	10/17/2012 12:21:23 PM
Zinc	12	5.0		mg/Kg	2	10/17/2012 12:21:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Aniline	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Azobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6') DUP

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Carbazole	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Chrysene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/13/2012 12:13:42 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Fluorene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Isophorone	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Naphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6') DUP

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/13/2012 12:13:42 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:13:42 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Phenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Pyridine	ND	0.50		mg/Kg	1	10/13/2012 12:13:42 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:13:42 AM
Surr: 2,4,6-Tribromophenol	79.0	21.3-145		%REC	1	10/13/2012 12:13:42 AM
Surr: 2-Fluorobiphenyl	80.0	20-131		%REC	1	10/13/2012 12:13:42 AM
Surr: 2-Fluorophenol	66.4	11.9-130		%REC	1	10/13/2012 12:13:42 AM
Surr: 4-Terphenyl-d14	66.3	25.1-149		%REC	1	10/13/2012 12:13:42 AM
Surr: Nitrobenzene-d5	81.2	25.6-137		%REC	1	10/13/2012 12:13:42 AM
Surr: Phenol-d5	79.3	20.3-132		%REC	1	10/13/2012 12:13:42 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00171	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Toluene	0.00120	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Ethylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Xylenes, Total	ND	0.00184		mg/Kg	1	10/11/2012 9:19:09 PM
Methyl tert-butyl ether (MTBE)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2,4-Trimethylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,3,5-Trimethylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dichloroethane (EDC)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dibromoethane (EDB)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Naphthalene	ND	0.00184		mg/Kg	1	10/11/2012 9:19:09 PM
1-Methylnaphthalene	ND	0.00369		mg/Kg	1	10/11/2012 9:19:09 PM
2-Methylnaphthalene	ND	0.00369		mg/Kg	1	10/11/2012 9:19:09 PM
Acetone	0.0149	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromodichloromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromoform	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Bromomethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2-Butanone	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
Carbon tetrachloride	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Chlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Chloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6') DUP

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Chloromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2-Chlorotoluene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Carbon disulfide	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
4-Chlorotoluene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
cis-1,2-DCE	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
cis-1,3-Dichloropropene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dibromo-3-chloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Dibromochloromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Dibromomethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,3-Dichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,4-Dichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Dichlorodifluoromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1-Dichloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1-Dichloroethene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2-Dichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,3-Dichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2,2-Dichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1-Dichloropropene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Hexachlorobutadiene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Isopropylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
4-Isopropyltoluene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Methylene chloride	ND	0.00277		mg/Kg	1	10/11/2012 9:19:09 PM
n-Butylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
2-Hexanone	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
n-Propylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
sec-Butylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Styrene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
4-Methyl-2-pentanone	ND	0.00922		mg/Kg	1	10/11/2012 9:19:09 PM
tert-Butylbenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,1,2-Tetrachloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,2,2-Tetrachloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Tetrachloroethene (PCE)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
trans-1,2-DCE	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
trans-1,3-Dichloropropene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2,3-Trichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,2,4-Trichlorobenzene	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,1-Trichloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
1,1,2-Trichloroethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Trichloroethene (TCE)	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Trichlorofluoromethane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (4-6') DUP

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-004

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Vinyl chloride	ND	0.000922		mg/Kg	1	10/11/2012 9:19:09 PM
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	1	10/11/2012 9:19:09 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	1	10/11/2012 9:19:09 PM
Surr: Dibromofluoromethane	94.8	70-130		%REC	1	10/11/2012 9:19:09 PM
Surr: Toluene-d8	87.1	70-130		%REC	1	10/11/2012 9:19:09 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (8-10')

Project: SWMU No.14

Collection Date: 10/9/2012 5:30:00 PM

Lab ID: 1210583-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/12/2012 10:15:10 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/12/2012 10:15:10 AM
Surr: DNOP	105	77.6-140		%REC	1	10/12/2012 10:15:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 4:35:03 AM
Surr: BFB	104	84-116		%REC	1	10/13/2012 4:35:03 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:33:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/23/2012 8:30:59 PM
Arsenic	ND	5.0		mg/Kg	2	10/17/2012 12:28:03 PM
Barium	250	1.0		mg/Kg	10	10/17/2012 2:51:50 PM
Beryllium	0.80	0.30		mg/Kg	2	10/17/2012 12:28:03 PM
Cadmium	ND	0.20		mg/Kg	2	10/17/2012 12:28:03 PM
Chromium	9.3	0.60		mg/Kg	2	10/17/2012 12:28:03 PM
Cobalt	3.8	0.60		mg/Kg	2	10/17/2012 12:28:03 PM
Iron	13000	500		mg/Kg	500	10/17/2012 2:54:18 PM
Lead	3.9	0.50		mg/Kg	2	10/17/2012 12:28:03 PM
Manganese	270	1.0		mg/Kg	10	10/17/2012 2:51:50 PM
Nickel	7.4	1.0		mg/Kg	2	10/17/2012 12:28:03 PM
Selenium	ND	5.0		mg/Kg	2	10/23/2012 8:30:59 PM
Silver	ND	0.50		mg/Kg	2	10/17/2012 12:28:03 PM
Vanadium	13	5.0		mg/Kg	2	10/17/2012 12:28:03 PM
Zinc	14	5.0		mg/Kg	2	10/17/2012 12:28:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Aniline	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Azobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (8-10')

Project: SWMU No.14

Collection Date: 10/9/2012 5:30:00 PM

Lab ID: 1210583-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Carbazole	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Chrysene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/13/2012 12:42:33 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Fluorene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Isophorone	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Naphthalene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (8-10')

Project: SWMU No.14

Collection Date: 10/9/2012 5:30:00 PM

Lab ID: 1210583-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/13/2012 12:42:33 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/13/2012 12:42:33 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Phenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Pyrene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Pyridine	ND	0.50		mg/Kg	1	10/13/2012 12:42:33 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/13/2012 12:42:33 AM
Surr: 2,4,6-Tribromophenol	70.9	21.3-145		%REC	1	10/13/2012 12:42:33 AM
Surr: 2-Fluorobiphenyl	69.8	20-131		%REC	1	10/13/2012 12:42:33 AM
Surr: 2-Fluorophenol	69.4	11.9-130		%REC	1	10/13/2012 12:42:33 AM
Surr: 4-Terphenyl-d14	58.7	25.1-149		%REC	1	10/13/2012 12:42:33 AM
Surr: Nitrobenzene-d5	75.0	25.6-137		%REC	1	10/13/2012 12:42:33 AM
Surr: Phenol-d5	76.1	20.3-132		%REC	1	10/13/2012 12:42:33 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00171	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Toluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Ethylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Xylenes, Total	ND	0.00224		mg/Kg	1	10/11/2012 9:49:58 PM
Methyl tert-butyl ether (MTBE)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2,4-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,3,5-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dichloroethane (EDC)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dibromoethane (EDB)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Naphthalene	ND	0.00224		mg/Kg	1	10/11/2012 9:49:58 PM
1-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/11/2012 9:49:58 PM
2-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/11/2012 9:49:58 PM
Acetone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromodichloromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromoform	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Bromomethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2-Butanone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
Carbon tetrachloride	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Chlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Chloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (8-10')

Project: SWMU No.14

Collection Date: 10/9/2012 5:30:00 PM

Lab ID: 1210583-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Chloromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2-Chlorotoluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Carbon disulfide	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
4-Chlorotoluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
cis-1,2-DCE	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
cis-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dibromo-3-chloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Dibromochloromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Dibromomethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,3-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,4-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Dichlorodifluoromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1-Dichloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1-Dichloroethene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,3-Dichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1-Dichloropropene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Hexachlorobutadiene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Isopropylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
4-Isopropyltoluene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Methylene chloride	ND	0.00336		mg/Kg	1	10/11/2012 9:49:58 PM
n-Butylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
2-Hexanone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
n-Propylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
sec-Butylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Styrene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
4-Methyl-2-pentanone	ND	0.0112		mg/Kg	1	10/11/2012 9:49:58 PM
tert-Butylbenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,1,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,2,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Tetrachloroethene (PCE)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
trans-1,2-DCE	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
trans-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2,3-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,2,4-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,1-Trichloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
1,1,2-Trichloroethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Trichloroethene (TCE)	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Trichlorofluoromethane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210583

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-22 (8-10')

Project: SWMU No.14

Collection Date: 10/9/2012 5:30:00 PM

Lab ID: 1210583-005

Matrix: SOIL

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Vinyl chloride	ND	0.00112		mg/Kg	1	10/11/2012 9:49:58 PM
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	10/11/2012 9:49:58 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%REC	1	10/11/2012 9:49:58 PM
Surr: Dibromofluoromethane	98.4	70-130		%REC	1	10/11/2012 9:49:58 PM
Surr: Toluene-d8	95.5	70-130		%REC	1	10/11/2012 9:49:58 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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

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

Batch #: 121012038
Project Name: 1210583

Analytical Results Report

Sample Number	121012038-001	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:16 P		
Client Sample ID	1210583-001D / SWMU 14-22 (0-0.5)			Sampling Time	4:45 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	2.4	Percent		10/24/2012	CRW	%moisture	

Sample Number	121012038-002	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:16 P		
Client Sample ID	1210583-002D / SWMU 14-22 (1.5-2)			Sampling Time	4:55 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	9.2	Percent		10/24/2012	CRW	%moisture	

Sample Number	121012038-003	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:16 P		
Client Sample ID	1210583-003D / SWMU 14-22 (4-6)			Sampling Time	5:20 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	18.3	Percent		10/24/2012	CRW	%moisture	

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 #: 121012038
Project Name: 1210583

Analytical Results Report

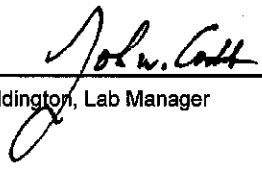
Sample Number 121012038-004 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-004D / SWMU 14-22 (4-6) DUP **Sampling Time** 5:20 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	17.3	Percent		10/24/2012	CRW	%moisture	

Sample Number 121012038-005 **Sampling Date** 10/9/2012 **Date/Time Received** 10/12/2012 12:16 P
Client Sample ID 1210583-005D / SWMU 14-22 (8-10) **Sampling Time** 5:30 PM
Matrix Soil **Sample Location**
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	20.8	Percent		10/24/2012	CRW	%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; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	MB-4254	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4254			RunNo: 6180					
Prep Date:	10/11/2012	Analysis Date: 10/12/2012			SeqNo: 178120		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		103	77.6	140			

Sample ID	LCS-4254		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4254		RunNo: 6180					
Prep Date:	10/11/2012		Analysis Date: 10/12/2012		SeqNo: 178205		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	84.4	52.6	130			
Surr: DNOP	4.4		5.000		88.5	77.6	140			

Sample ID	1210582-001CMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 4254			RunNo: 6180					
Prep Date:	10/11/2012	Analysis Date: 10/12/2012			SeqNo: 178471		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.60	0	115	57.2	146			
Surr: DNOP	3.3		4.960		65.9	77.6	140			S

Sample ID	1210582-001CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4254		RunNo: 6180					
Prep Date:	10/11/2012		Analysis Date: 10/12/2012		SeqNo: 178474		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.9	49.26	0	123	57.2	146	6.62	24.5	
Surr: DNOP	3.5		4.926		71.7	77.6	140	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID: R6205			RunNo: 6205					
Prep Date:		Analysis Date: 10/12/2012			SeqNo: 178737		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		103	84	116			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178738		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID	1210582-004BMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178751		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.2	5.0	18.26	0	39.3	70	130			S
Surr: BFB	780		730.5		107	84	116			

Sample ID	1210582-004BMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178752		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	18.26	0	87.4	70	130	76.0	22.1	R
Surr: BFB	800		730.5		109	84	116	0	0	

Sample ID	B27		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178761		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	1100		1000		105	84	116			

Sample ID	2.5UG GRO LCS-II		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 178762		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74	117			
Surr: BFB	1100		1000		112	84	116			

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	1210653-005BMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R6205		RunNo: 6205					
Prep Date:			Analysis Date: 10/12/2012		SeqNo: 178768		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	70	130			
Surr: BFB	1100		1000		113	84	116			

Sample ID	1210653-005BMSD			SampType: MSD	TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: R6205		RunNo: 6205					
Prep Date:	Analysis Date: 10/12/2012			SeqNo: 178769		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	70	130	7.96	22.1	
Surr: BFB	1200		1000		117	84	116	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	mb-4251		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4251			RunNo: 6184				
Prep Date:	10/11/2012		Analysis Date: 10/11/2012			SeqNo: 178168 Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	mb-4251		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 178168		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.4		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	44.5		50.00		89.0	70	130			
Surr: Dibromofluoromethane	45.4		50.00		90.9	70	130			
Surr: Toluene-d8	43.9		50.00		87.8	70	130			

Sample ID	lcs-4251		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 180403		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	9.63	1.00	10.00	0	96.3	60	140			
Toluene	9.93	1.00	10.00	0	99.3	60	140			
Chlorobenzene	10.3	1.00	10.00	0	103	60	140			
1,1-Dichloroethene	11.1	1.00	10.00	0	111	60	140			
Trichloroethene (TCE)	8.17	1.00	10.00	0	81.7	60	140			
Surr: 1,2-Dichloroethane-d4	45.2		50.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	lcs-4251		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4251		RunNo: 6184					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 180403		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.5	70	130			
Surr: Toluene-d8	49.1		50.00		98.2	70	130			

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	mb-4255	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4255	RunNo:	6206					
Prep Date:	10/11/2012	Analysis Date:	10/12/2012	SeqNo:	178793	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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	mb-4255		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4255			RunNo: 6206				
Prep Date:	10/11/2012		Analysis Date: 10/12/2012			SeqNo: 178793		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		3.330		96.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		90.7	20	131			
Surr: 2-Fluorophenol	3.0		3.330		91.3	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.4	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.7	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.4	20.3	132			

Sample ID	lcs-4255		SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSS		Batch ID: 4255			RunNo: 6206				
Prep Date:	10/11/2012		Analysis Date: 10/12/2012			SeqNo: 178794		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	Ics-4255	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 4255			RunNo: 6206					
Prep Date:	10/11/2012	Analysis Date: 10/12/2012			SeqNo: 178794		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	73.9	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	80.8	43.8	89.1			
2-Chlorophenol	2.2	0.20	3.330	0	67.4	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	67.6	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.6	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	81.4	39.1	86.9			
4-Nitrophenol	2.6	0.25	3.330	0	77.3	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.9	36.2	80			
Phenol	2.4	0.20	3.330	0	72.3	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.2	34.7	98.8			
1,2,4-Trichlorobenzene	1.2	0.20	1.670	0	71.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.3	20	131			
Surr: 2-Fluorophenol	2.2		3.330		66.5	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.0	25.1	149			
Surr: Nitrobenzene-d5	1.3		1.670		77.6	25.6	137			
Surr: Phenol-d5	2.6		3.330		77.6	20.3	132			

Sample ID	1210582-001Cms	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 4255			RunNo: 6206					
Prep Date:	10/11/2012	Analysis Date: 10/12/2012			SeqNo: 178807		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.91	0.40	1.667	0.1738	44.2	38.6	100			
4-Chloro-3-methylphenol	1.9	1.0	3.324	0	55.7	35.8	108			
2-Chlorophenol	1.7	0.40	3.324	0	51.8	48.2	96.1			
1,4-Dichlorobenzene	0.85	0.40	1.667	0	51.1	42.5	97.6			
2,4-Dinitrotoluene	ND	1.0	1.667	0	42.5	51.2	108			S
N-Nitrosodi-n-propylamine	1.0	0.40	1.667	0	61.2	31.6	114			
4-Nitrophenol	1.9	0.50	3.324	0	58.2	22.7	144			
Pentachlorophenol	1.5	0.80	3.324	0	46.2	24	109			
Phenol	1.8	0.40	3.324	0	54.0	33.1	108			
Pyrene	0.90	0.40	1.667	0	53.9	42.7	98.9			
1,2,4-Trichlorobenzene	0.85	0.40	1.667	0	50.7	27.1	118			
Surr: 2,4,6-Tribromophenol	2.0		3.324		59.6	21.3	145			
Surr: 2-Fluorobiphenyl	0.91		1.667		54.4	20	131			
Surr: 2-Fluorophenol	1.8		3.324		53.2	11.9	130			
Surr: 4-Terphenyl-d14	0.85		1.667		51.2	25.1	149			
Surr: Nitrobenzene-d5	0.89		1.667		53.3	25.6	137			
Surr: Phenol-d5	2.1		3.324		62.2	20.3	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	1210582-001Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	4255	RunNo:	6206					
Prep Date:	10/11/2012	Analysis Date:	10/12/2012	SeqNo:	178808	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	0.76	0.40	1.660	0.1738	35.2	38.6	100	18.3	20	S
4-Chloro-3-methylphenol	1.6	0.99	3.310	0	47.7	35.8	108	15.8	20	
2-Chlorophenol	1.5	0.40	3.310	0	44.1	48.2	96.1	16.5	20	S
1,4-Dichlorobenzene	0.67	0.40	1.660	0	40.4	42.5	97.6	23.7	20	SR
2,4-Dinitrotoluene	ND	0.99	1.660	0	33.7	51.2	108	0	20	SR
N-Nitrosodi-n-propylamine	0.77	0.40	1.660	0	46.3	31.6	114	28.0	20	R
4-Nitrophenol	1.6	0.50	3.310	0	48.0	22.7	144	19.5	20	
Pentachlorophenol	1.3	0.80	3.310	0	38.4	24	109	19.0	20	
Phenol	1.4	0.40	3.310	0	43.3	33.1	108	22.5	20	R
Pyrene	0.74	0.40	1.660	0	44.7	42.7	98.9	19.0	20	
1,2,4-Trichlorobenzene	0.69	0.40	1.660	0	41.5	27.1	118	20.3	20	R
Surr: 2,4,6-Tribromophenol	1.6		3.310		48.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	0.72		1.660		43.6	20	131	0	0	
Surr: 2-Fluorophenol	1.5		3.310		44.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	0.68		1.660		41.2	25.1	149	0	0	
Surr: Nitrobenzene-d5	0.71		1.660		42.8	25.6	137	0	0	
Surr: Phenol-d5	1.6		3.310		47.6	20.3	132	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	MB-4317		SampType: mblk		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180708		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4317		SampType: lcs		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180709		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID	1210656-004CMS		SampType: ms		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180735		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Sample ID	1210656-004CMSD		SampType: msd		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180736		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20	

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	MB-4300	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4300	RunNo:	6281					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181006	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								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4300	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4300	RunNo:	6281					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181012	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0.9150	90.4	80	120			
Arsenic	27	2.5	25.00	0	107	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Beryllium	27	0.15	25.00	0	108	80	120			
Cadmium	26	0.10	25.00	0	104	80	120			
Chromium	25	0.30	25.00	0	100	80	120			
Cobalt	25	0.30	25.00	0	100	80	120			
Lead	26	0.25	25.00	0	103	80	120			
Manganese	25	0.10	25.00	0.05000	99.4	80	120			
Nickel	25	0.50	25.00	0	99.0	80	120			
Selenium	26	2.5	25.00	0	105	80	120			
Silver	5.2	0.25	5.000	0	104	80	120			
Vanadium	26	2.5	25.00	0	103	80	120			
Zinc	26	2.5	25.00	0	104	80	120			

Sample ID	MB-4300	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4300	RunNo:	6310					
Prep Date:	10/15/2012	Analysis Date:	10/17/2012	SeqNo:	181592	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	LCS-4300		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 4300		RunNo: 6310					
Prep Date:	10/15/2012		Analysis Date: 10/17/2012		SeqNo: 181593		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	108	80	120			

Sample ID	1210583-001CMS	SampType: MS		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	SWMU 14-22 (0-0.5')	Batch ID: 4300		RunNo: 6310						
Prep Date:	10/15/2012	Analysis Date: 10/17/2012		SeqNo: 181667		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	25	0.75	24.84	0.8953	96.7	75	125			
Cadmium	22	0.50	24.84	0	90.2	75	125			
Chromium	31	1.5	24.84	12.41	74.0	75	125			S
Cobalt	26	1.5	24.84	5.546	80.5	75	125			
Lead	26	1.3	24.84	5.875	81.9	75	125			
Nickel	29	2.5	24.84	8.319	83.0	75	125			
Silver	4.6	1.3	4.967	0	92.2	75	125			
Vanadium	47	13	24.84	25.45	86.0	75	125			
Zinc	49	13	24.84	33.40	64.7	75	125			S

Sample ID	1210583-001CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-22 (0-0.5')		Batch ID: 4300		RunNo: 6310					
Prep Date:	10/15/2012		Analysis Date: 10/17/2012		SeqNo: 181668		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	26	0.75	24.89	0.8953	101	75	125	4.27	20	
Cadmium	23	0.50	24.89	0	94.2	75	125	4.55	20	
Chromium	33	1.5	24.89	12.41	83.0	75	125	7.15	20	
Cobalt	27	1.5	24.89	5.546	85.8	75	125	5.17	20	
Lead	28	1.2	24.89	5.875	87.0	75	125	4.93	20	
Nickel	30	2.5	24.89	8.319	88.6	75	125	4.90	20	
Silver	4.9	1.2	4.978	0	98.0	75	125	6.31	20	
Vanadium	48	12	24.89	25.45	91.4	75	125	2.90	20	
Zinc	58	12	24.89	33.40	98.3	75	125	15.6	20	

Sample ID	1210583-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-22 (0-0.5')	Batch ID:	4300	RunNo:	6437					
Prep Date:	10/15/2012	Analysis Date:	10/23/2012	SeqNo:	185157	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.84	0	30.6	75	125			S
Arsenic	25	12	24.84	0	102	75	125			
Selenium	13	12	24.84	0	53.6	75	125			S

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210583

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU No.14

Sample ID	1210583-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-22 (0-0.5')	Batch ID:	4300	RunNo:	6437					
Prep Date:	10/15/2012	Analysis Date:	10/23/2012	SeqNo:	185160	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.89	0	34.4	75	125	0	20	S
Arsenic	26	12	24.89	0	105	75	125	3.33	20	
Selenium	16	12	24.89	0	62.7	75	125	16.0	20	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4101
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210583

Received by/date: mg 10/11/12

Logged By: Michelle Garcia 10/11/2012 8:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia 10/11/2012 8:42:39 AM

Michelle Garcia

Reviewed By: [Signature] 10/11/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. 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)

17. 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: _____

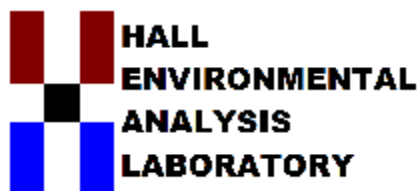
18. Additional remarks:

19. Cooler Information

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☒	A	Antimony	mg/Kg		0.629	0	
☒	A	Arsenic	mg/Kg		0.6263	0	
☒	A	Barium	mg/Kg		0.0609	0	
☒	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☒	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☒	A	Chromium	mg/Kg		0.1184	0	
☒	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☒	A	Iron	mg/Kg		0.7476	0	
☒	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☒	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☒	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☒	A	Selenium	mg/Kg		1.4025	0	
☒	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☒	A	Vanadium	mg/Kg		0.0565	0	
☒	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Ag
+ Cu



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

October 30, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1210585

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 2 sample(s) on 10/11/2012 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. 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. 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.

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 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:00:00 PM

Lab ID: 1210585-001

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/11/2012 6:39:12 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/11/2012 6:39:12 PM
Surr: DNOP	113	79.5-166		%REC	1	10/11/2012 6:39:12 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	ND	0.10		mg/L	1	10/11/2012 12:06:42 PM
Chloride	ND	0.50		mg/L	1	10/11/2012 12:06:42 PM
Sulfate	ND	0.50		mg/L	1	10/11/2012 12:06:42 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Beryllium	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Cadmium	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Chromium	ND	0.0060		mg/L	1	10/12/2012 11:03:15 AM
Cobalt	ND	0.0060		mg/L	1	10/12/2012 11:03:15 AM
Iron	ND	0.020		mg/L	1	10/12/2012 11:03:15 AM
Manganese	ND	0.0020		mg/L	1	10/12/2012 11:03:15 AM
Nickel	ND	0.010		mg/L	1	10/12/2012 11:03:15 AM
Silver	ND	0.0050		mg/L	1	10/12/2012 11:03:15 AM
Vanadium	ND	0.050		mg/L	1	10/12/2012 11:03:15 AM
Zinc	ND	0.010		mg/L	1	10/12/2012 11:03:15 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
Lead	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
Selenium	ND	0.0010		mg/L	1	10/17/2012 12:43:57 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/15/2012 6:58:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Acenaphthylene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Aniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Anthracene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Azobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benz(a)anthracene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Benzoic acid	ND	20		µg/L	1	10/14/2012 1:10:39 PM
Benzyl alcohol	ND	10		µg/L	1	10/14/2012 1:10:39 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:00:00 PM

Lab ID: 1210585-001

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Carbazole	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Chloroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Chlorophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Chrysene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Dibenzofuran	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Diethyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Dimethyl phthalate	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Fluoranthene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Fluorene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Hexachloroethane	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Isophorone	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Methylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
3+4-Methylphenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/14/2012 1:10:39 PM

Qualifiers:

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- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:00:00 PM

Lab ID: 1210585-001

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Naphthalene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
3-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Nitrobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
4-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Pentachlorophenol	ND	20		µg/L	1	10/14/2012 1:10:39 PM
Phenanthrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Phenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Pyrene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Pyridine	ND	10		µg/L	1	10/14/2012 1:10:39 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:10:39 PM
Surr: 2,4,6-Tribromophenol	70.3	44.2-126		%REC	1	10/14/2012 1:10:39 PM
Surr: 2-Fluorobiphenyl	53.4	37-114		%REC	1	10/14/2012 1:10:39 PM
Surr: 2-Fluorophenol	46.2	23.4-98		%REC	1	10/14/2012 1:10:39 PM
Surr: 4-Terphenyl-d14	65.5	41.3-116		%REC	1	10/14/2012 1:10:39 PM
Surr: Nitrobenzene-d5	55.4	39.5-118		%REC	1	10/14/2012 1:10:39 PM
Surr: Phenol-d5	35.2	20.9-95.9		%REC	1	10/14/2012 1:10:39 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Toluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Ethylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Naphthalene	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 1:14:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 1:14:39 PM
Acetone	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Bromobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Bromoform	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Bromomethane	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
2-Butanone	ND	10		µg/L	1	10/11/2012 1:14:39 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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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 Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:00:00 PM

Lab ID: 1210585-001

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Chlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Chloroethane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Chloroform	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Chloromethane	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Dibromomethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
2-Hexanone	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/11/2012 1:14:39 PM
Methylene Chloride	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/11/2012 1:14:39 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Styrene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:00:00 PM

Lab ID: 1210585-001

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/11/2012 1:14:39 PM
Vinyl chloride	ND	1.0		µg/L	1	10/11/2012 1:14:39 PM
Xylenes, Total	ND	1.5		µg/L	1	10/11/2012 1:14:39 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	10/11/2012 1:14:39 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	1	10/11/2012 1:14:39 PM
Surr: Dibromofluoromethane	92.5	70-130		%REC	1	10/11/2012 1:14:39 PM
Surr: Toluene-d8	92.0	70-130		%REC	1	10/11/2012 1:14:39 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/11/2012 1:14:39 PM
Surr: BFB	93.9	70-130		%REC	1	10/11/2012 1:14:39 PM

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:15:00 PM

Lab ID: 1210585-002

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/11/2012 7:04:03 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/11/2012 7:04:03 PM
Surr: DNOP	115	79.5-166		%REC	1	10/11/2012 7:04:03 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	ND	0.10		mg/L	1	10/11/2012 12:56:20 PM
Chloride	ND	0.50		mg/L	1	10/11/2012 12:56:20 PM
Sulfate	ND	0.50		mg/L	1	10/11/2012 12:56:20 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Beryllium	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Cadmium	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Chromium	ND	0.0060		mg/L	1	10/12/2012 11:15:11 AM
Cobalt	ND	0.0060		mg/L	1	10/12/2012 11:15:11 AM
Iron	ND	0.020		mg/L	1	10/12/2012 11:15:11 AM
Manganese	ND	0.0020		mg/L	1	10/12/2012 11:15:11 AM
Nickel	ND	0.010		mg/L	1	10/12/2012 11:15:11 AM
Silver	ND	0.0050		mg/L	1	10/12/2012 11:15:11 AM
Vanadium	ND	0.050		mg/L	1	10/12/2012 11:15:11 AM
Zinc	ND	0.010		mg/L	1	10/12/2012 11:15:11 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
Lead	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
Selenium	ND	0.0010		mg/L	1	10/17/2012 12:51:48 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/15/2012 6:59:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Acenaphthylene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Aniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Anthracene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Azobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benz(a)anthracene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Benzoic acid	ND	20		µg/L	1	10/14/2012 1:40:00 PM
Benzyl alcohol	ND	10		µg/L	1	10/14/2012 1:40:00 PM

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Analytical Report

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Lab ID: 1210585-002

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Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Carbazole	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Chloroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Chlorophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Chrysene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Dibenzofuran	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Diethyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Dimethyl phthalate	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Fluoranthene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Fluorene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Hexachloroethane	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Isophorone	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Methylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
3+4-Methylphenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/14/2012 1:40:00 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:15:00 PM

Lab ID: 1210585-002

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Naphthalene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
3-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Nitroaniline	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Nitrobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
4-Nitrophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Pentachlorophenol	ND	20		µg/L	1	10/14/2012 1:40:00 PM
Phenanthrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Phenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Pyrene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Pyridine	ND	10		µg/L	1	10/14/2012 1:40:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/14/2012 1:40:00 PM
Surr: 2,4,6-Tribromophenol	74.3	44.2-126		%REC	1	10/14/2012 1:40:00 PM
Surr: 2-Fluorobiphenyl	55.0	37-114		%REC	1	10/14/2012 1:40:00 PM
Surr: 2-Fluorophenol	46.8	23.4-98		%REC	1	10/14/2012 1:40:00 PM
Surr: 4-Terphenyl-d14	64.6	41.3-116		%REC	1	10/14/2012 1:40:00 PM
Surr: Nitrobenzene-d5	56.5	39.5-118		%REC	1	10/14/2012 1:40:00 PM
Surr: Phenol-d5	35.1	20.9-95.9		%REC	1	10/14/2012 1:40:00 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Toluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Ethylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Naphthalene	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 3:06:43 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/11/2012 3:06:43 PM
Acetone	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Bromobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Bromoform	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Bromomethane	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
2-Butanone	ND	10		µg/L	1	10/11/2012 3:06:43 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:15:00 PM

Lab ID: 1210585-002

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Chlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Chloroethane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Chloroform	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Chloromethane	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Dibromomethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
2-Hexanone	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/11/2012 3:06:43 PM
Methylene Chloride	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/11/2012 3:06:43 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Styrene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210585

Date Reported: 10/30/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: FB100912

Project: SWMU NO.14

Collection Date: 10/9/2012 6:15:00 PM

Lab ID: 1210585-002

Matrix: AQUEOUS

Received Date: 10/11/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/11/2012 3:06:43 PM
Vinyl chloride	ND	1.0		µg/L	1	10/11/2012 3:06:43 PM
Xylenes, Total	ND	1.5		µg/L	1	10/11/2012 3:06:43 PM
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%REC	1	10/11/2012 3:06:43 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	1	10/11/2012 3:06:43 PM
Surr: Dibromofluoromethane	90.6	70-130		%REC	1	10/11/2012 3:06:43 PM
Surr: Toluene-d8	93.5	70-130		%REC	1	10/11/2012 3:06:43 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/11/2012 3:06:43 PM
Surr: BFB	95.3	70-130		%REC	1	10/11/2012 3:06:43 PM

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 Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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

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

Batch #: 121012023
Project Name: 1210585

Analytical Results Report

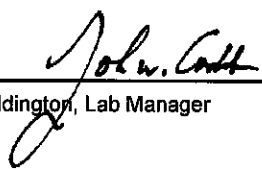
Sample Number	121012023-001	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:10 PM
Client Sample ID	1210585-001E / EB100912			Sampling Time	6:00 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/22/2012	CRW	EPA 335.4	

Sample Number	121012023-002	Sampling Date	10/9/2012	Date/Time Received	10/12/2012 12:10 PM
Client Sample ID	1210585-002E / FB100912			Sampling Time	6:15 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/22/2012	CRW	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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID:	R6212	RunNo:	6212					
Prep Date:		Analysis Date:	10/12/2012	SeqNo:	178907	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 200.7: Metals					
Client ID:	LCSW	Batch ID:	R6212	RunNo:	6212					
Prep Date:		Analysis Date:	10/12/2012	SeqNo:	178908	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Barium	0.51	0.0020	0.5000	0	101	85	115			
Beryllium	0.52	0.0020	0.5000	0	105	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Cobalt	0.49	0.0060	0.5000	0	98.2	85	115			
Iron	0.50	0.020	0.5000	0	99.7	85	115			
Manganese	0.49	0.0020	0.5000	0	98.8	85	115			
Nickel	0.48	0.010	0.5000	0	96.6	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.52	0.050	0.5000	0	105	85	115			
Zinc	0.51	0.010	0.5000	0	101	85	115			

Sample ID	1210368-001BMS	SampType:	MS	TestCode:	EPA Method 200.7: Metals					
Client ID:	BatchQC	Batch ID:	R6212	RunNo:	6212					
Prep Date:		Analysis Date:	10/12/2012	SeqNo:	178913	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.50	0.0060	0.5000	0	101	70	130			

Sample ID	1210368-001BMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Metals					
Client ID:	BatchQC	Batch ID:	R6212	RunNo:	6212					
Prep Date:		Analysis Date:	10/12/2012	SeqNo:	178914	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.50	0.0060	0.5000	0	99.2	70	130	1.42	20	

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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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210046-001AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R6315		RunNo: 6315					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181878		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.0010	0.02500	0.001891	99.5	70	130			

Sample ID	1210367-001BMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R6315		RunNo: 6315					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181885		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.6	70	130			
Arsenic	0.035	0.0010	0.02500	0.01018	101	70	130			
Selenium	0.031	0.0010	0.02500	0.005490	104	70	130			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R6315		RunNo: 6315					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181905		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.9	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R6315		RunNo: 6315					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181906		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	101	85	115			
Arsenic	0.026	0.0010	0.02500	0	102	85	115			
Lead	0.025	0.0010	0.02500	0	99.6	85	115			
Selenium	0.027	0.0010	0.02500	0	106	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R6315		RunNo: 6315					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181907		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.7	85	115			
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Lead	0.025	0.0010	0.02500	0	100	85	115			
Selenium	0.026	0.0010	0.02500	0	106	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R6315			RunNo: 6315					
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 181909		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R6315			RunNo: 6315					
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 181910		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R6315			RunNo: 6315					
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 181911		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	1210585-001CMS			SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	EB100912			Batch ID:	R6315		RunNo:	6315			
Prep Date:				Analysis Date:	10/17/2012		SeqNo:	181948		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Antimony	0.026	0.0010	0.02500	0	103	70	130				
Arsenic	0.026	0.0010	0.02500	0	102	70	130				
Lead	0.025	0.0010	0.02500	0	99.7	70	130				
Selenium	0.026	0.0010	0.02500	0	105	70	130				

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4303		SampType: mblk		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 4303		RunNo: 6268					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180618		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-4303		SampType: lcs		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 4303		RunNo: 6268					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180619		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	95.8	80	120			

Sample ID	1210352-007BMS		SampType: ms		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4303		RunNo: 6268					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180639		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	93.6	75	125			

Sample ID	1210352-007BMSD		SampType: msd		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4303		RunNo: 6268					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180642		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0047	0.00020	0.005000	0	94.2	75	125	0.680	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R6188			RunNo: 6188					
Prep Date:		Analysis Date: 10/11/2012			SeqNo: 178268		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R6188		RunNo: 6188					
Prep Date:			Analysis Date: 10/11/2012		SeqNo: 178269		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.48	0.10	0.5000	0	96.8	90	110			
Chloride	4.8	0.50	5.000	0	95.3	90	110			
Sulfate	9.5	0.50	10.00	0	95.4	90	110			

Sample ID	1210585-001FMS	SampType: MS			TestCode: EPA Method 300.0: Anions					
Client ID:	EB100912	Batch ID: R6188			RunNo: 6188					
Prep Date:		Analysis Date: 10/11/2012			SeqNo: 178271		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	94.8	76.6	110			
Chloride	4.8	0.50	5.000	0.1379	92.7	87.8	111			
Sulfate	9.6	0.50	10.00	0	95.9	84.6	122			

Sample ID	1210585-001FMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	EB100912		Batch ID: R6188		RunNo: 6188					
Prep Date:			Analysis Date: 10/11/2012		SeqNo: 178272		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.8	76.6	110	3.16	20	
Chloride	4.8	0.50	5.000	0.1379	93.6	87.8	111	0.930	20	
Sulfate	9.6	0.50	10.00	0	96.4	84.6	122	0.537	20	

Sample ID	1210593-001AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6188		RunNo: 6188					
Prep Date:			Analysis Date: 10/11/2012		SeqNo: 178283		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.10	0.5000	2.006	86.2	76.6	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup**Project:** SWMU NO.14

Sample ID	1210593-001AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R6188	RunNo:	6188					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178284	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	2.4	0.10	0.5000	2.006	86.2	76.6	110	0.00821	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4249		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW		Batch ID: 4249		RunNo: 6146					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 177920		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		112	79.5	166			

Sample ID	LCS-4249		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 4249		RunNo: 6146					
Prep Date:	10/11/2012		Analysis Date: 10/11/2012		SeqNo: 177921		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.1	1.0	5.000	0	81.7	74	157			
Surr: DNOP	0.53		0.5000		105	79.5	166			

Sample ID	LCSD-4249	SampType: LCSD			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02	Batch ID: 4249			RunNo: 6146					
Prep Date:	10/11/2012	Analysis Date: 10/11/2012			SeqNo: 177922		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.7	1.0	5.000	0	74.3	74	157	9.49	23	
Surr: DNOP	0.50		0.5000		101	79.5	166	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6183			RunNo: 6183					
Prep Date:		Analysis Date: 10/11/2012			SeqNo: 178201		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID 5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R6183			RunNo: 6183						
Prep Date:	Analysis Date: 10/11/2012			SeqNo: 178201		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.5	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.9	70	130			
Surr: Toluene-d8	9.3		10.00		93.2	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R6183			RunNo: 6183						
Prep Date:	Analysis Date: 10/11/2012			SeqNo: 178203		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	19	1.0	20.00	0	94.8	80	120			
Chlorobenzene	19	1.0	20.00	0	95.1	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.2	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	84.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R6183		RunNo: 6183					
Prep Date:			Analysis Date: 10/11/2012		SeqNo: 178203		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.0		10.00		90.4	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	70	130			

Sample ID	1210585-001ams	SampType: MS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	EB100912	Batch ID: R6183			RunNo: 6183					
Prep Date:		Analysis Date: 10/11/2012			SeqNo: 178207		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	116	66.8	128			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	97.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.2		10.00		92.2	70	130			

Sample ID	1210585-001amsd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	EB100912		Batch ID: R6183		RunNo: 6183					
Prep Date:			Analysis Date: 10/11/2012		SeqNo: 178208		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	66.8	128	8.48	16.7	
Toluene	21	1.0	20.00	0	107	70	130	2.10	18.7	
Chlorobenzene	22	1.0	20.00	0	108	70	130	2.28	19.5	
1,1-Dichloroethene	19	1.0	20.00	0	92.8	70	130	13.6	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	93.0	70	130	5.02	17.5	
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130	0	0	
Surr: Dibromofluoromethane	9.1		10.00		90.9	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		95.8	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4270		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 4270		RunNo: 6220					
Prep Date:	10/12/2012		Analysis Date: 10/14/2012		SeqNo: 179276		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	10								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4270		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 4270			RunNo: 6220				
Prep Date:	10/12/2012		Analysis Date: 10/14/2012			SeqNo: 179276		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	97		200.0		48.5	44.2	126			
Surr: 2-Fluorobiphenyl	48		100.0		47.8	37	114			
Surr: 2-Fluorophenol	68		200.0		34.0	23.4	98			
Surr: 4-Terphenyl-d14	60		100.0		60.1	41.3	116			
Surr: Nitrobenzene-d5	55		100.0		54.6	39.5	118			
Surr: Phenol-d5	67		200.0		33.3	20.9	95.9			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-4270	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 4270			RunNo: 6220					
Prep Date:	10/12/2012	Analysis Date: 10/14/2012			SeqNo: 179277		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	68.4	38.2	99.4			
4-Chloro-3-methylphenol	150	10	200.0	0	77.1	35.5	108			
2-Chlorophenol	130	10	200.0	0	63.2	29.8	106			
1,4-Dichlorobenzene	61	10	100.0	0	60.6	32.6	91.5			
2,4-Dinitrotoluene	92	10	100.0	0	92.1	44.7	112			
N-Nitrosodi-n-propylamine	80	10	100.0	0	80.1	38.5	105			
4-Nitrophenol	76	10	200.0	0	38.1	11.6	73.1			
Pentachlorophenol	88	20	200.0	0	43.8	20.2	93			
Phenol	78	10	200.0	0	39.1	23	66.1			
Pyrene	69	10	100.0	0	68.6	40.1	101			
1,2,4-Trichlorobenzene	67	10	100.0	0	67.4	37.7	99.1			
Surr: 2,4,6-Tribromophenol	140		200.0		70.2	44.2	126			
Surr: 2-Fluorobiphenyl	68		100.0		68.1	37	114			
Surr: 2-Fluorophenol	110		200.0		54.6	23.4	98			
Surr: 4-Terphenyl-d14	64		100.0		64.0	41.3	116			
Surr: Nitrobenzene-d5	72		100.0		72.0	39.5	118			
Surr: Phenol-d5	92		200.0		46.0	20.9	95.9			

Sample ID	Icsd-4270		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 4270		RunNo: 6220					
Prep Date:	10/12/2012		Analysis Date: 10/14/2012		SeqNo: 179278		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	67	10	100.0	0	66.9	38.2	99.4	2.22	20	
4-Chloro-3-methylphenol	150	10	200.0	0	77.0	35.5	108	0.0649	20	
2-Chlorophenol	120	10	200.0	0	62.0	29.8	106	1.92	20	
1,4-Dichlorobenzene	59	10	100.0	0	59.3	32.6	91.5	2.23	20	
2,4-Dinitrotoluene	88	10	100.0	0	88.4	44.7	112	4.01	20	
N-Nitrosodi-n-propylamine	77	10	100.0	0	77.0	38.5	105	3.95	20	
4-Nitrophenol	85	10	200.0	0	42.7	11.6	73.1	11.3	20	
Pentachlorophenol	100	20	200.0	0	50.9	20.2	93	14.8	20	
Phenol	81	10	200.0	0	40.5	23	66.1	3.54	20	
Pyrene	69	10	100.0	0	69.4	40.1	101	1.13	20	
1,2,4-Trichlorobenzene	61	10	100.0	0	60.7	37.7	99.1	10.4	20	
Surr: 2,4,6-Tribromophenol	160		200.0		81.7	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	70		100.0		69.5	37	114	0	0	
Surr: 2-Fluorophenol	110		200.0		56.4	23.4	98	0	0	
Surr: 4-Terphenyl-d14	66		100.0		65.6	41.3	116	0	0	
Surr: Nitrobenzene-d5	71		100.0		71.5	39.5	118	0	0	
Surr: Phenol-d5	90		200.0		45.1	20.9	95.9	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210585

30-Oct-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml rb	SampType:	MBLK	TestCode:	Modified EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID:	R6183	RunNo:	6183					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178164	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.8		10.00		98.5	70	130			

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	Modified EPA Method 8015B: Gasoline Range					
Client ID:	LCSW	Batch ID:	R6183	RunNo:	6183					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178166	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	90.8	85	115			
Surr: BFB	9.5		10.00		95.0	70	130			

Sample ID	1210585-002ams	SampType:	MS	TestCode:	Modified EPA Method 8015B: Gasoline Range					
Client ID:	FB100912	Batch ID:	R6183	RunNo:	6183					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178167	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.1	70	130			
Surr: BFB	9.5		10.00		95.2	70	130			

Sample ID	1210517-001AMSD	SampType:	MSD	TestCode:	Modified EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6183	RunNo:	6183					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178170	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	1.2	0.050	0.5000	0.8288	81.9	70	130	5.02	20	
Surr: BFB	9.1		10.00		90.7	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

Sample Log-In Check List

Client Name: Western Refining Gallup		Work Order Number: 1210585
Received by/date: <u>MJ</u> <u>10/11/12</u>		
Logged By: Michelle Garcia	10/11/2012 8:00:00 AM	<i>Michelle Garcia</i>
Completed By: Michelle Garcia	10/11/2012 9:00:09 AM	<i>Michelle Garcia</i>
Reviewed By: <u>[Signature]</u> <u>10/11/12</u>		

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: 2 2

Adjusted? <2 or >12 unless noted

Checked by: [Signature]

Special Handling (if applicable)

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

Person Notified:	<u>[Signature]</u>	Date:	<u>[Signature]</u>
By Whom:	<u>[Signature]</u>	Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	<u>[Signature]</u>		
Client Instructions:	<u>[Signature]</u>		

18. Additional remarks:

19. Cooler Information

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☒	A	Antimony ~	mg/Kg		0.629	0	
☒	A	Arsenic ~	mg/Kg		0.6263	0	
☒	A	Barium ~	mg/Kg		0.0609	0	
☒	A	Beryllium ~	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☒	A	Cadmium ~	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☒	A	Chromium ~	mg/Kg		0.1184	0	
☒	A	Cobalt ~	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☒	A	Iron ~	mg/Kg		0.7476	0	
☒	A	Lead ~	mg/Kg		0.2194	0	
☐	A	Magnesium ~	mg/Kg		0.4651	0	
☒	A	Manganese ~	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☒	A	Nickel ~	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☒	A	Selenium ~	mg/Kg		1.4025	0	
☒	A	Silver ~	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☒	A	Vanadium ~	mg/Kg		0.0565	0	
☒	A	Zinc ~	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cu

Ag
Cl
F
SO₄



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

November 12, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1210656

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 4 sample(s) on 10/12/2012 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. 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. 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.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:45:00 PM

Lab ID: 1210656-001

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	45	10		mg/Kg	1	10/15/2012 12:03:50 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/15/2012 12:03:50 PM
Surr: DNOP	84.6	77.6-140		%REC	1	10/15/2012 12:03:50 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 7:35:41 PM
Surr: BFB	88.6	84-116		%REC	1	10/19/2012 7:35:41 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.10	0.033		mg/kg	1	10/16/2012 5:59:00 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Barium	600	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Beryllium	0.61	0.30		mg/Kg	2	10/25/2012 3:06:37 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 3:06:37 PM
Chromium	9.6	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Cobalt	3.4	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Iron	13000	500		mg/Kg	500	10/25/2012 3:39:26 PM
Lead	4.2	0.50		mg/Kg	2	10/25/2012 3:06:37 PM
Manganese	720	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Nickel	5.9	1.0		mg/Kg	2	10/25/2012 3:06:37 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:41:44 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Zinc	140	12		mg/Kg	5	10/25/2012 3:21:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:45:00 PM

Lab ID: 1210656-001

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 9:34:14 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 9:34:14 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 9:34:14 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:45:00 PM

Lab ID: 1210656-001

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 9:34:14 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:34:14 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 9:34:14 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:34:14 AM
Surr: 2,4,6-Tribromophenol	49.3	21.3-145		%REC	1	10/21/2012 9:34:14 AM
Surr: 2-Fluorobiphenyl	51.8	20-131		%REC	1	10/21/2012 9:34:14 AM
Surr: 2-Fluorophenol	50.6	11.9-130		%REC	1	10/21/2012 9:34:14 AM
Surr: 4-Terphenyl-d14	56.6	25.1-149		%REC	1	10/21/2012 9:34:14 AM
Surr: Nitrobenzene-d5	53.3	25.6-137		%REC	1	10/21/2012 9:34:14 AM
Surr: Phenol-d5	49.3	20.3-132		%REC	1	10/21/2012 9:34:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00261	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Toluene	0.00750	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Ethylbenzene	0.00207	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Xylenes, Total	0.0103	0.00216		mg/Kg	1	10/12/2012 4:21:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2,4-Trimethylbenzene	0.00512	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,3,5-Trimethylbenzene	0.00205	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dichloroethane (EDC)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dibromoethane (EDB)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Naphthalene	ND	0.00216		mg/Kg	1	10/12/2012 4:21:07 PM
1-Methylnaphthalene	ND	0.00431		mg/Kg	1	10/12/2012 4:21:07 PM
2-Methylnaphthalene	ND	0.00431		mg/Kg	1	10/12/2012 4:21:07 PM
Acetone	0.101	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromodichloromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromoform	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Bromomethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2-Butanone	0.0188	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
Carbon tetrachloride	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Chlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Chloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:45:00 PM

Lab ID: 1210656-001

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Chloromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2-Chlorotoluene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Carbon disulfide	ND	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
4-Chlorotoluene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
cis-1,2-DCE	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
cis-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dibromo-3-chloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Dibromochloromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Dibromomethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,3-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,4-Dichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Dichlorodifluoromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1-Dichloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1-Dichloroethene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,3-Dichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2,2-Dichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1-Dichloropropene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Hexachlorobutadiene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Isopropylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
4-Isopropyltoluene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Methylene chloride	ND	0.00323		mg/Kg	1	10/12/2012 4:21:07 PM
n-Butylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
2-Hexanone	ND	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
n-Propylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
sec-Butylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Styrene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
4-Methyl-2-pentanone	0.0142	0.0108		mg/Kg	1	10/12/2012 4:21:07 PM
tert-Butylbenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,1,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,2,2-Tetrachloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Tetrachloroethene (PCE)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
trans-1,2-DCE	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
trans-1,3-Dichloropropene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2,3-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,2,4-Trichlorobenzene	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,1-Trichloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
1,1,2-Trichloroethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Trichloroethene (TCE)	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Trichlorofluoromethane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:45:00 PM

Lab ID: 1210656-001

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Vinyl chloride	ND	0.00108		mg/Kg	1	10/12/2012 4:21:07 PM
Surr: 1,2-Dichloroethane-d4	91.6	70-130		%REC	1	10/12/2012 4:21:07 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/12/2012 4:21:07 PM
Surr: Dibromofluoromethane	97.2	70-130		%REC	1	10/12/2012 4:21:07 PM
Surr: Toluene-d8	97.7	70-130		%REC	1	10/12/2012 4:21:07 PM

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RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:55:00 PM

Lab ID: 1210656-002

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	32	9.9		mg/Kg	1	10/15/2012 3:29:18 PM
Motor Oil Range Organics (MRO)	75	49		mg/Kg	1	10/15/2012 3:29:18 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/15/2012 3:29:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 8:04:27 PM
Surr: BFB	87.9	84-116		%REC	1	10/19/2012 8:04:27 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 6:00:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Barium	460	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Beryllium	0.62	0.30		mg/Kg	2	10/25/2012 8:22:15 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:22:15 PM
Chromium	15	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Iron	12000	500		mg/Kg	500	10/25/2012 8:27:45 PM
Lead	7.6	0.50		mg/Kg	2	10/25/2012 8:22:15 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Nickel	6.5	1.0		mg/Kg	2	10/25/2012 8:22:15 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:53:24 PM
Vanadium	16	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Zinc	41	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Acenaphthylene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Aniline	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Anthracene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Azobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Benzoic acid	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM

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- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:55:00 PM

Lab ID: 1210656-002

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Carbazole	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/21/2012 10:03:19 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Chrysene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Dibenzofuran	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/21/2012 10:03:19 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/21/2012 10:03:19 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
Fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Fluorene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Hexachloroethane	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Isophorone	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2-Methylphenol	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Naphthalene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:55:00 PM

Lab ID: 1210656-002

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
Nitrobenzene	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/21/2012 10:03:19 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/21/2012 10:03:19 AM
Phenanthrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Phenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Pyrene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Pyridine	ND	2.5		mg/Kg	1	10/21/2012 10:03:19 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 10:03:19 AM
Surr: 2,4,6-Tribromophenol	100	21.3-145		%REC	1	10/21/2012 10:03:19 AM
Surr: 2-Fluorobiphenyl	105	20-131		%REC	1	10/21/2012 10:03:19 AM
Surr: 2-Fluorophenol	91.6	11.9-130		%REC	1	10/21/2012 10:03:19 AM
Surr: 4-Terphenyl-d14	117	25.1-149		%REC	1	10/21/2012 10:03:19 AM
Surr: Nitrobenzene-d5	112	25.6-137		%REC	1	10/21/2012 10:03:19 AM
Surr: Phenol-d5	102	20.3-132		%REC	1	10/21/2012 10:03:19 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00151	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Toluene	0.00235	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Ethylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Xylenes, Total	ND	0.00147		mg/Kg	1	10/12/2012 4:51:51 PM
Methyl tert-butyl ether (MTBE)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2,4-Trimethylbenzene	0.000894	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,3,5-Trimethylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dichloroethane (EDC)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dibromoethane (EDB)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Naphthalene	ND	0.00147		mg/Kg	1	10/12/2012 4:51:51 PM
1-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/12/2012 4:51:51 PM
2-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/12/2012 4:51:51 PM
Acetone	0.0383	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromodichloromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromoform	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Bromomethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2-Butanone	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
Carbon tetrachloride	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Chlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Chloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:55:00 PM

Lab ID: 1210656-002

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Chloromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2-Chlorotoluene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Carbon disulfide	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
4-Chlorotoluene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
cis-1,2-DCE	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
cis-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dibromo-3-chloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Dibromochloromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Dibromomethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,3-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,4-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Dichlorodifluoromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1-Dichloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1-Dichloroethene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,3-Dichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1-Dichloropropene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Hexachlorobutadiene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Isopropylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
4-Isopropyltoluene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Methylene chloride	ND	0.00220		mg/Kg	1	10/12/2012 4:51:51 PM
n-Butylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
2-Hexanone	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
n-Propylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
sec-Butylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Styrene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
4-Methyl-2-pentanone	ND	0.00733		mg/Kg	1	10/12/2012 4:51:51 PM
tert-Butylbenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,1,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,2,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Tetrachloroethene (PCE)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
trans-1,2-DCE	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
trans-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2,3-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,2,4-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,1-Trichloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
1,1,2-Trichloroethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Trichloroethene (TCE)	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Trichlorofluoromethane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM

Qualifiers:

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:55:00 PM

Lab ID: 1210656-002

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Vinyl chloride	ND	0.000733		mg/Kg	1	10/12/2012 4:51:51 PM
Surr: 1,2-Dichloroethane-d4	95.7	70-130		%REC	1	10/12/2012 4:51:51 PM
Surr: 4-Bromofluorobenzene	122	70-130		%REC	1	10/12/2012 4:51:51 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/12/2012 4:51:51 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	10/12/2012 4:51:51 PM

Qualifiers:

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RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (12-14')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:05:00 PM

Lab ID: 1210656-003

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	140	9.8		mg/Kg	1	10/13/2012 5:56:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/13/2012 5:56:28 PM
Surr: DNOP	96.6	77.6-140		%REC	1	10/13/2012 5:56:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	160	100		mg/Kg	20	10/20/2012 1:19:56 PM
Surr: BFB	130	84-116	S	%REC	20	10/20/2012 1:19:56 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 6:02:34 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Barium	220	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Beryllium	0.87	0.30		mg/Kg	2	10/25/2012 8:45:39 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:45:39 PM
Chromium	8.3	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Iron	13000	500		mg/Kg	500	10/25/2012 8:51:11 PM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 8:45:39 PM
Manganese	300	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Nickel	7.2	1.0		mg/Kg	2	10/25/2012 8:45:39 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:08:43 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Zinc	13	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM

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- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (12-14')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:05:00 PM

Lab ID: 1210656-003

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 11:33:10 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 11:33:10 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 11:33:10 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Isophorone	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (12-14')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:05:00 PM

Lab ID: 1210656-003

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 11:33:10 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:33:10 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Pyridine	ND	0.50		mg/Kg	1	10/20/2012 11:33:10 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:33:10 PM
Surr: 2,4,6-Tribromophenol	104	21.3-145		%REC	1	10/20/2012 11:33:10 PM
Surr: 2-Fluorobiphenyl	104	20-131		%REC	1	10/20/2012 11:33:10 PM
Surr: 2-Fluorophenol	95.6	11.9-130		%REC	1	10/20/2012 11:33:10 PM
Surr: 4-Terphenyl-d14	89.8	25.1-149		%REC	1	10/20/2012 11:33:10 PM
Surr: Nitrobenzene-d5	102	25.6-137		%REC	1	10/20/2012 11:33:10 PM
Surr: Phenol-d5	102	20.3-132		%REC	1	10/20/2012 11:33:10 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	1.1	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Toluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Ethylbenzene	3.8	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,4-Trimethylbenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Naphthalene	1.3	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1-Methylnaphthalene	2.3	2.0		mg/Kg	10	10/23/2012 11:06:01 PM
2-Methylnaphthalene	3.5	2.0		mg/Kg	10	10/23/2012 11:06:01 PM
Acetone	ND	7.5		mg/Kg	10	10/23/2012 11:06:01 PM
Bromobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Bromodichloromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Bromoform	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Bromomethane	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
2-Butanone	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Carbon disulfide	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Chlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Chloroethane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM

Qualifiers:

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- P Sample pH greater than 2
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (12-14')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:05:00 PM

Lab ID: 1210656-003

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Chloromethane	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Dibromochloromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Dibromomethane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,1-Dichloropropene	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
2-Hexanone	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Isopropylbenzene	0.74	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
4-Isopropyltoluene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/23/2012 11:06:01 PM
Methylene chloride	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
n-Butylbenzene	ND	1.5		mg/Kg	10	10/23/2012 11:06:01 PM
n-Propylbenzene	1.3	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
sec-Butylbenzene	0.51	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Styrene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (12-14')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:05:00 PM

Lab ID: 1210656-003

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.50		mg/Kg	10	10/23/2012 11:06:01 PM
Xylenes, Total	ND	1.0		mg/Kg	10	10/23/2012 11:06:01 PM
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%REC	10	10/23/2012 11:06:01 PM
Surr: 4-Bromofluorobenzene	72.8	70-130		%REC	10	10/23/2012 11:06:01 PM
Surr: Dibromofluoromethane	98.6	70-130		%REC	10	10/23/2012 11:06:01 PM
Surr: Toluene-d8	94.5	70-130		%REC	10	10/23/2012 11:06:01 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (14-16')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:15:00 PM

Lab ID: 1210656-004

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	19	9.9		mg/Kg	1	10/13/2012 6:21:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/13/2012 6:21:33 PM
Surr: DNOP	96.6	77.6-140		%REC	1	10/13/2012 6:21:33 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 11:25:35 PM
Surr: BFB	89.0	84-116		%REC	1	10/19/2012 11:25:35 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 6:04:29 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Barium	130	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Beryllium	0.75	0.30		mg/Kg	2	10/25/2012 8:56:59 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:56:59 PM
Chromium	7.8	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Iron	12000	500		mg/Kg	500	10/25/2012 9:02:34 PM
Lead	3.5	0.50		mg/Kg	2	10/25/2012 8:56:59 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Nickel	6.8	1.0		mg/Kg	2	10/25/2012 8:56:59 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:11:38 PM
Vanadium	15	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (14-16')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:15:00 PM

Lab ID: 1210656-004

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 12:02:25 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 12:02:25 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 12:02:25 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (14-16')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:15:00 PM

Lab ID: 1210656-004

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 12:02:25 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:02:25 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 12:02:25 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:02:25 AM
Surr: 2,4,6-Tribromophenol	86.6	21.3-145		%REC	1	10/21/2012 12:02:25 AM
Surr: 2-Fluorobiphenyl	90.8	20-131		%REC	1	10/21/2012 12:02:25 AM
Surr: 2-Fluorophenol	80.7	11.9-130		%REC	1	10/21/2012 12:02:25 AM
Surr: 4-Terphenyl-d14	78.9	25.1-149		%REC	1	10/21/2012 12:02:25 AM
Surr: Nitrobenzene-d5	94.2	25.6-137		%REC	1	10/21/2012 12:02:25 AM
Surr: Phenol-d5	89.9	20.3-132		%REC	1	10/21/2012 12:02:25 AM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Toluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Naphthalene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/19/2012 9:15:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/19/2012 9:15:47 PM
Acetone	ND	0.75		mg/Kg	1	10/19/2012 9:15:47 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Bromoform	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Bromomethane	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
2-Butanone	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Chloroethane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (14-16')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:15:00 PM

Lab ID: 1210656-004

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Chloroform	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Chloromethane	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/19/2012 9:15:47 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/19/2012 9:15:47 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Styrene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-23 (14-16')

Project: SWMU NO.14

Collection Date: 10/10/2012 2:15:00 PM

Lab ID: 1210656-004

Matrix: SOIL

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Vinyl chloride	ND	0.050		mg/Kg	1	10/19/2012 9:15:47 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/19/2012 9:15:47 PM
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	10/19/2012 9:15:47 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	10/19/2012 9:15:47 PM
Surr: Dibromofluoromethane	91.4	70-130		%REC	1	10/19/2012 9:15:47 PM
Surr: Toluene-d8	99.6	70-130		%REC	1	10/19/2012 9:15:47 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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

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

Batch #: 121017005
Project Name: 1210656

Analytical Results Report

Sample Number	121017005-001	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210656-001D / SWMU 14-23 (0-0.5)			Sampling Time	1:45 PM
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.364	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	2.1	Percent		10/26/2012	CRW	%moisture	

Sample Number	121017005-002	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210656-002D / SWMU 14-23 (1.5-2)			Sampling Time	1:55 PM
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	5.48	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	5.2	Percent		10/26/2012	CRW	%moisture	

Sample Number	121017005-003	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210656-003D / SWMU 14-23 (12-14)			Sampling Time	2:05 PM
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	19.9	Percent		10/26/2012	CRW	%moisture	

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

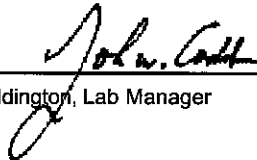
Batch #: 121017005
Project Name: 1210656

Analytical Results Report

Sample Number	121017005-004	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210656-004D / SWMU 14-23 (14-16)			Sampling Time	2:15 PM
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/23/2012	CRW	EPA 335.4	
%moisture	15.8	Percent		10/26/2012	CRW	%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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4283		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4283		RunNo: 6213					
Prep Date:	10/12/2012		Analysis Date: 10/13/2012		SeqNo: 179030		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	9.1		10.00		91.2	77.6	140			

Sample ID	LCS-4283		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4283		RunNo: 6213					
Prep Date:	10/12/2012		Analysis Date: 10/13/2012		SeqNo: 179032		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	78.6	52.6	130			
Surr: DNOP	4.1		5.000		81.4	77.6	140			

Sample ID	1210653-001CMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 4283			RunNo: 6226					
Prep Date:	10/12/2012	Analysis Date: 10/15/2012			SeqNo: 179425		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	10	51.18	103.8	-4.05	57.2	146			S
Surr: DNOP	3.9		5.118		75.7	77.6	140			S

Sample ID	1210653-001CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4283		RunNo: 6226					
Prep Date:	10/12/2012		Analysis Date: 10/15/2012		SeqNo: 179426		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	120	10	49.80	103.8	32.2	57.2	146	16.4	24.5	S
Surr: DNOP	4.2		4.980		84.5	77.6	140	0	0	

Sample ID	MB-4297		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4297		RunNo: 6226					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 179526		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.9	77.6	140			

Sample ID	LCS-4297		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4297		RunNo: 6226					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 179527		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.5	77.6	140			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4282		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4282		RunNo: 6371					
Prep Date:	10/12/2012		Analysis Date: 10/19/2012		SeqNo: 183155		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	910		1000		91.4	84	116			

Sample ID	LCS-4282		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4282		RunNo: 6371					
Prep Date:	10/12/2012		Analysis Date: 10/19/2012		SeqNo: 183156		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	93.8	74	117			
Surr: BFB	960		1000		96.4	84	116			

Sample ID	1210668-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4282		RunNo: 6371					
Prep Date:	10/12/2012		Analysis Date: 10/19/2012		SeqNo: 183162		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	24	23.63	6.612	71.0	70	130			
Surr: BFB	4500		4726		96.1	84	116			

Sample ID	1210668-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range						
Client ID:	BatchQC		Batch ID: 4282		RunNo: 6371						
Prep Date:	10/12/2012		Analysis Date: 10/19/2012		SeqNo: 183163		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	24	23.61	6.612	65.0	70	130	0	22.1	S	
Surr: BFB	4300		4721		90.4	84	116	0	0		

Sample ID	MB-4318		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4318		RunNo: 6373					
Prep Date:	10/15/2012		Analysis Date: 10/20/2012		SeqNo: 183238		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		89.4	84	116			

Sample ID	LCS-4318		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4318		RunNo: 6373					
Prep Date:	10/15/2012		Analysis Date: 10/20/2012		SeqNo: 183239		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	93.9	74	117			
Surr: BFB	940		1000		93.6	84	116			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210683-006AMS	SampType: MS			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID: 4318			RunNo: 6373					
Prep Date:	10/15/2012	Analysis Date: 10/21/2012			SeqNo: 183246		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.98	0	88.0	70	130			
Surr: BFB	930		999.0		92.6	84	116			

Sample ID	1210683-006AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4318		RunNo: 6373					
Prep Date:	10/15/2012		Analysis Date: 10/21/2012		SeqNo: 183247		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.9	24.27	0	74.7	70	130	19.2	22.1	
Surr: BFB	910		970.9		93.3	84	116	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4282		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	4282		RunNo:	6255			
Prep Date:	10/12/2012		Analysis Date:	10/16/2012		SeqNo:	180339		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.6	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.8	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.8	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID	lcs-4282		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	4282		RunNo:	6255			
Prep Date:	10/12/2012		Analysis Date:	10/16/2012		SeqNo:	180340		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.6	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.6	70	130			
Surr: Toluene-d8	0.50		0.5000		99.8	70	130			

Sample ID	b2		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	R6394		RunNo:	6394			
Prep Date:			Analysis Date:	10/19/2012		SeqNo:	184052		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								
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	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	b2	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID:	R6394	RunNo:	6394					
Prep Date:		Analysis Date:	10/19/2012	SeqNo:	184052	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.10								
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	0.10								
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.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b2	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBS	Batch ID: R6394		RunNo: 6394							
Prep Date:	Analysis Date: 10/19/2012		SeqNo: 184052		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID 100ng lcsc	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSS	Batch ID: R6394		RunNo: 6394							
Prep Date:	Analysis Date: 10/19/2012		SeqNo: 184056		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	114	70	130			
Toluene	1.0	0.050	1.000	0	102	80	120			
Chlorobenzene	1.0	0.050	1.000	0	100	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	108	74	124			
Trichloroethene (TCE)	0.95	0.050	1.000	0	94.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.6	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID 1210582-003bms	SampType: MS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R6394		RunNo: 6394							
Prep Date:	Analysis Date: 10/19/2012		SeqNo: 184057		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.0	0.50	5.641	0.9563	108	80.9	118			
Toluene	5.9	0.50	5.641	0.06927	104	69.5	119			
Chlorobenzene	5.8	0.50	5.641	0	104	75.7	115			
1,1-Dichloroethene	5.8	0.50	5.641	0	103	68.6	126			
Trichloroethene (TCE)	5.2	0.50	5.641	0	92.0	68.7	115			
Surr: 1,2-Dichloroethane-d4	2.7		2.820		95.2	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.820		73.3	70	130			
Surr: Dibromofluoromethane	2.7		2.820		95.5	70	130			
Surr: Toluene-d8	2.7		2.820		95.6	70	130			

Sample ID 1210582-003bmsd	SampType: MSD		TestCode: EPA Method 8260B: VOLATILES							
Client ID: BatchQC	Batch ID: R6394		RunNo: 6394							
Prep Date:	Analysis Date: 10/19/2012		SeqNo: 184058		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210582-003bmsd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R6394		RunNo: 6394					
Prep Date:			Analysis Date: 10/19/2012		SeqNo: 184058		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.1	0.50	5.641	0.9563	109	80.9	118	0.812	20	
Toluene	5.7	0.50	5.641	0.06927	100	69.5	119	3.36	20	
Chlorobenzene	5.7	0.50	5.641	0	101	75.7	115	2.30	20	
1,1-Dichloroethene	5.6	0.50	5.641	0	99.4	68.6	126	3.18	24.8	
Trichloroethene (TCE)	5.2	0.50	5.641	0	91.9	68.7	115	0.0761	20	
Surr: 1,2-Dichloroethane-d4	2.8		2.820		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.820		69.9	70	130	0	0	S
Surr: Dibromofluoromethane	2.7		2.820		95.4	70	130	0	0	
Surr: Toluene-d8	2.6		2.820		93.2	70	130	0	0	

Sample ID	vcb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID: R6450			RunNo: 6450					
Prep Date:		Analysis Date: 10/23/2012			SeqNo: 185560		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								
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	0.10								
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								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	vcb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS	Batch ID: R6450			RunNo: 6450					
Prep Date:		Analysis Date: 10/23/2012			SeqNo: 185560	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
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	0.10								
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								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	vcb		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS		Batch ID: R6450		RunNo: 6450					
Prep Date:			Analysis Date: 10/23/2012		SeqNo: 185560		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.46		0.5000		91.8	70	130			
Surr: Toluene-d8	0.46		0.5000		91.3	70	130			

Sample ID	1210734-012a ms			SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC			Batch ID:	R6450		RunNo:	6450			
Prep Date:				Analysis Date:	10/23/2012		SeqNo:	185567		Units:	mg/Kg-dry
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.65	0.050	0.6367	0	102	80.9	118				
Toluene	0.68	0.050	0.6367	0	107	69.5	119				
Chlorobenzene	0.67	0.050	0.6367	0	105	75.7	115				
1,1-Dichloroethene	0.65	0.050	0.6367	0	103	68.6	126				
Trichloroethene (TCE)	0.62	0.050	0.6367	0	98.0	68.7	115				
Surr: 1,2-Dichloroethane-d4	0.29		0.3184		90.6	70	130				
Surr: 4-Bromofluorobenzene	0.30		0.3184		95.5	70	130				
Surr: Dibromofluoromethane	0.30		0.3184		92.8	70	130				
Surr: Toluene-d8	0.29		0.3184		92.3	70	130				

Sample ID	1210734-012a msd			SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC			Batch ID:	R6450		RunNo:	6450			
Prep Date:	Analysis Date:			10/23/2012		SeqNo:	185568		Units: mg/Kg-dry		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.63	0.050	0.6367	0	99.1	80.9	118	3.10	20		
Toluene	0.69	0.050	0.6367	0	109	69.5	119	2.15	20		
Chlorobenzene	0.70	0.050	0.6367	0	110	75.7	115	4.30	20		
1,1-Dichloroethene	0.64	0.050	0.6367	0	101	68.6	126	1.95	24.8		
Trichloroethene (TCE)	0.60	0.050	0.6367	0	93.9	68.7	115	4.28	20		
Surr: 1,2-Dichloroethane-d4	0.28		0.3184		88.6	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.30		0.3184		94.4	70	130	0	0		
Surr: Dibromofluoromethane	0.30		0.3184		94.1	70	130	0	0		
Surr: Toluene-d8	0.30		0.3184		93.2	70	130	0	0		

Sample ID	100ng icv	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS	Batch ID: R6450			RunNo: 6450					
Prep Date:		Analysis Date: 10/23/2012			SeqNo: 185691		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	100	70	130			
Toluene	1.1	0.050	1.000	0	106	80	120			
Chlorobenzene	1.1	0.050	1.000	0	107	70	130			
1,1-Dichloroethene	1.2	0.050	1.000	0	118	74	124			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng icv		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	R6450		RunNo:	6450			
Prep Date:			Analysis Date:	10/23/2012		SeqNo:	185691		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	0.99	0.050	1.000	0	99.3	70	130			
Surr: 1,2-Dichloroethane-d4	1.5		1.500		97.7	70	130			
Surr: 4-Bromofluorobenzene	1.6		1.500		106	70	130			
Surr: Dibromofluoromethane	1.5		1.500		98.4	70	130			
Surr: Toluene-d8	1.5		1.500		99.9	70	130			

Sample ID	mb-4362		SampType:	MBLK		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	PBS		Batch ID:	4362		RunNo:	6485			
Prep Date:	10/17/2012		Analysis Date:	10/24/2012		SeqNo:	186696		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID	1210683-001ams		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	4282		RunNo:	6485			
Prep Date:	10/12/2012		Analysis Date:	10/24/2012		SeqNo:	186734		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.4897		93.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4897		94.5	70	130			
Surr: Dibromofluoromethane	0.45		0.4897		92.1	70	130			
Surr: Toluene-d8	0.47		0.4897		96.8	70	130			

Sample ID	1210683-001amsd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	BatchQC		Batch ID:	4282		RunNo:	6485			
Prep Date:	10/12/2012		Analysis Date:	10/24/2012		SeqNo:	186735		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.4888		93.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.41		0.4888		83.7	70	130	0	0	
Surr: Dibromofluoromethane	0.47		0.4888		95.8	70	130	0	0	
Surr: Toluene-d8	0.44		0.4888		89.7	70	130	0	0	

Sample ID	lcs-4362		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSS		Batch ID:	4362		RunNo:	6485			
Prep Date:	10/17/2012		Analysis Date:	10/24/2012		SeqNo:	186792		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	lcs-4362		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 4362		RunNo: 6485					
Prep Date:	10/17/2012		Analysis Date: 10/24/2012		SeqNo: 186792		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.1	70	130			
Surr: Toluene-d8	0.47		0.5000		94.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4280		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4280			RunNo: 6223				
Prep Date:	10/12/2012		Analysis Date: 10/12/2012			SeqNo: 179318		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4280		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4280		RunNo: 6223					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 179318		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	ND	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	45.9		50.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.3	70	130			
Surr: Dibromofluoromethane	49.4		50.00		98.8	70	130			
Surr: Toluene-d8	46.4		50.00		92.9	70	130			

Sample ID	lcs-4280		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4280		RunNo: 6223					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 180404		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12.3	1.00	12.50	0	98.3	60	140			
Toluene	11.6	1.00	12.50	0	93.2	60	140			
Chlorobenzene	12.4	1.00	12.50	0	99.5	60	140			
1,1-Dichloroethene	13.9	1.00	12.50	0	111	60	140			
Trichloroethene (TCE)	10.5	1.00	12.50	0	84.3	60	140			
Surr: 1,2-Dichloroethane-d4	46.0		50.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	lcs-4280		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4280		RunNo: 6223					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 180404		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.9		50.00		93.9	70	130			
Surr: Toluene-d8	42.8		50.00		85.7	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4304	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4304	RunNo:	6287					
Prep Date:	10/15/2012	Analysis Date:	10/16/2012	SeqNo:	181172	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	ND	0.50								
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	0.50								
Di-n-octyl phthalate	ND	0.25								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4304		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	4304		RunNo:	6287			
Prep Date:	10/15/2012		Analysis Date:	10/16/2012		SeqNo:	181172		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.3		3.330		99.2	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		87.3	20	131			
Surr: 2-Fluorophenol	2.9		3.330		86.6	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.7	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		86.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		85.1	20.3	132			

Sample ID	lcs-4304		SampType:	LCS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	LCSS		Batch ID:	4304		RunNo:	6287			
Prep Date:	10/15/2012		Analysis Date:	10/16/2012		SeqNo:	181173		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-4304		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4304		RunNo: 6287					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 181173		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.20	1.670	0	87.0	49.7	98.1			
4-Chloro-3-methylphenol	2.8	0.50	3.330	0	83.9	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	70.1	41.1	96.9			
1,4-Dichlorobenzene	1.2	0.20	1.670	0	70.8	41	97.4			
2,4-Dinitrotoluene	1.8	0.50	1.670	0	107	44.4	104			S
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	84.8	39.1	86.9			
4-Nitrophenol	2.9	0.25	3.330	0	87.7	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.0	36.2	80			
Phenol	2.5	0.20	3.330	0	76.4	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	71.1	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	79.0	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.3		3.330		98.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.9	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		74.2	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.6	25.6	137			
Surr: Phenol-d5	2.8		3.330		84.9	20.3	132			

Sample ID	mb-4337		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 4337		RunNo: 6376					
Prep Date:	10/16/2012		Analysis Date: 10/21/2012		SeqNo: 183352		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.2		3.330		95.0	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.8	20	131			
Surr: 2-Fluorophenol	2.5		3.330		75.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		76.8	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		84.4	25.6	137			
Surr: Phenol-d5	2.6		3.330		78.4	20.3	132			

Sample ID	Ics-4337		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4337		RunNo: 6376					
Prep Date:	10/16/2012		Analysis Date: 10/21/2012		SeqNo: 183353		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		89.9	20	131			
Surr: 2-Fluorophenol	2.4		3.330		71.3	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.670		85.9	25.1	149			
Surr: Nitrobenzene-d5	1.6		1.670		93.1	25.6	137			
Surr: Phenol-d5	2.9		3.330		86.8	20.3	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210653-001CMS	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 4304			RunNo: 6376					
Prep Date:	10/15/2012	Analysis Date: 10/21/2012			SeqNo: 183387		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.40	1.664	0	74.7	25.6	142			
4-Chloro-3-methylphenol	2.6	1.0	3.318	0	78.7	63.7	100			
2-Chlorophenol	2.4	0.40	3.318	0	73.0	22.2	126			
1,4-Dichlorobenzene	1.1	0.40	1.664	0	69.0	12.4	115			
2,4-Dinitrotoluene	1.3	1.0	1.664	0	78.8	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.40	1.664	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.50	3.318	0	73.6	36.7	130			
Pentachlorophenol	2.2	0.80	3.318	0	66.4	15.8	113			
Phenol	2.5	0.40	3.318	0	73.9	25.1	124			
Pyrene	1.5	0.40	1.664	0	88.1	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.40	1.664	0	82.7	30	113			
Surr: 2,4,6-Tribromophenol	3.3		3.318		101	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.664		94.0	20	131			
Surr: 2-Fluorophenol	2.9		3.318		88.7	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.664		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.664		103	25.6	137			
Surr: Phenol-d5	3.2		3.318		97.8	20.3	132			

Sample ID	1210692-010CMS		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC		Batch ID: 4337		RunNo: 6376					
Prep Date:	10/16/2012		Analysis Date: 10/21/2012		SeqNo: 183388		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	3.3		3.350		97.8	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.680		94.5	20	131			
Surr: 2-Fluorophenol	2.7		3.350		79.9	11.9	130			
Surr: 4-Terphenyl-d14	1.4		1.680		83.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.680		104	25.6	137			
Surr: Phenol-d5	3.1		3.350		93.0	20.3	132			

Sample ID	1210653-001CMSD		SampType: MSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC		Batch ID: 4304		RunNo: 6376					
Prep Date:	10/15/2012		Analysis Date: 10/21/2012		SeqNo: 183389		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.672	0	75.2	25.6	142	1.09	22	
4-Chloro-3-methylphenol	2.4	1.0	3.334	0	73.0	63.7	100	7.05	27.3	
2-Chlorophenol	2.3	0.40	3.334	0	67.8	22.2	126	6.86	26.3	
1,4-Dichlorobenzene	1.0	0.40	1.672	0	61.9	12.4	115	10.4	27.4	
2,4-Dinitrotoluene	1.3	1.0	1.672	0	77.2	14.9	142	1.50	27.4	
N-Nitrosodi-n-propylamine	1.3	0.40	1.672	0	75.4	13.9	136	7.14	22.6	
4-Nitrophenol	2.4	0.50	3.334	0	73.4	36.7	130	0.281	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210653-001CMSD	SampType: MSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 4304			RunNo: 6376					
Prep Date:	10/15/2012	Analysis Date: 10/21/2012			SeqNo: 183389		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Pentachlorophenol	2.2	0.80	3.334	0	66.2	15.8	113	0.258	27.1	
Phenol	2.1	0.40	3.334	0	62.9	25.1	124	15.6	32.2	
Pyrene	1.3	0.40	1.672	0	79.2	35.8	124	10.1	29.5	
1,2,4-Trichlorobenzene	1.3	0.40	1.672	0	80.6	30	113	2.14	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.334		92.3	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.672		87.3	20	131	0	0	
Surr: 2-Fluorophenol	2.8		3.334		83.7	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.672		84.8	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.5		1.672		91.5	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.334		88.5	20.3	132	0	0	

Sample ID	1210692-010CMSD	SampType:	MSD		TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	4337		RunNo:	6376					
Prep Date:	10/16/2012	Analysis Date:	10/21/2012		SeqNo:	183390		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 2,4,6-Tribromophenol	3.2		3.332		97.1	21.3	145	0	0		
Surr: 2-Fluorobiphenyl	1.6		1.671		98.0	20	131	0	0		
Surr: 2-Fluorophenol	2.6		3.332		76.9	11.9	130	0	0		
Surr: 4-Terphenyl-d14	1.3		1.671		78.6	25.1	149	0	0		
Surr: Nitrobenzene-d5	1.7		1.671		101	25.6	137	0	0		
Surr: Phenol-d5	3.0		3.332		89.3	20.3	132	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4317		SampType: mblk		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180708		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4317		SampType: lcs		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180709		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1667	0	98.7	80	120			

Sample ID	1210656-004CMS		SampType: ms		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 14-23 (14-16'		Batch ID: 4317		RunNo: 6270					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180735		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1654	0	96.4	75	125			

Sample ID	1210656-004CMSD			SampType:	msd		TestCode:	EPA Method 7471: Mercury			
Client ID:	SWMU 14-23 (14-16'			Batch ID:	4317		RunNo:	6270			
Prep Date:	10/15/2012		Analysis Date:	10/16/2012		SeqNo:	180736		Units: mg/kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.16	0.033	0.1655	0	96.8	75	125	0.493	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4441	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186822	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								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4441	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186823	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	23	2.5	25.00	0	92.2	80	120			
Arsenic	23	2.5	25.00	0	93.7	80	120			
Barium	23	0.10	25.00	0	92.2	80	120			
Beryllium	24	0.15	25.00	0	95.1	80	120			
Cadmium	23	0.10	25.00	0	92.8	80	120			
Chromium	23	0.30	25.00	0	91.8	80	120			
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	23	1.0	25.00	0	93.7	80	120			
Lead	23	0.25	25.00	0	91.3	80	120			
Manganese	23	0.10	25.00	0.04450	90.3	80	120			
Nickel	22	0.50	25.00	0	87.6	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Vanadium	24	2.5	25.00	0	95.4	80	120			
Zinc	23	2.5	25.00	0	90.7	80	120			

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-23 (0-0.5')	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186932	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.2	5.0	24.67	0	20.9	75	125			S
Arsenic	23	5.0	24.67	2.167	85.1	75	125			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-23 (0-0.5')	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186932	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	21	0.30	24.67	0.6108	83.1	75	125			
Cadmium	19	0.20	24.67	0	78.2	75	125			
Chromium	31	0.60	24.67	9.563	87.0	75	125			
Cobalt	21	0.60	24.67	3.401	71.6	75	125			S
Lead	22	0.50	24.67	4.192	72.5	75	125			S
Nickel	24	1.0	24.67	5.943	73.5	75	125			S
Selenium	11	5.0	24.67	0	43.9	75	125			S
Vanadium	41	5.0	24.67	17.94	92.0	75	125			

Sample ID	1210656-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-23 (0-0.5')	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186933	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.23	0	20.3	75	125	200	20	S
Arsenic	23	5.0	24.23	2.167	87.5	75	125	0.929	20	
Beryllium	21	0.30	24.23	0.6108	85.4	75	125	0.909	20	
Cadmium	20	0.20	24.23	0	82.3	75	125	3.30	20	
Chromium	30	0.60	24.23	9.563	83.1	75	125	4.37	20	
Cobalt	21	0.60	24.23	3.401	72.9	75	125	0.0820	20	S
Lead	21	0.50	24.23	4.192	70.5	75	125	3.76	20	S
Nickel	24	1.0	24.23	5.943	75.3	75	125	0.450	20	
Selenium	13	5.0	24.23	0	54.1	75	125	19.1	20	S
Vanadium	39	5.0	24.23	17.94	88.1	75	125	3.41	20	

Sample ID	MB-4441	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4441	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188994	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID	LCS-4441	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4441	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188995	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.3	0.25	5.000	0	106	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210656

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-23 (0-0.5')	Batch ID:	4441	RunNo:	6598					
Prep Date:	10/22/2012	Analysis Date:	10/31/2012	SeqNo:	190745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.935	0	86.1	75	125			

Sample ID	1210656-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 14-23 (0-0.5')	Batch ID:	4441	RunNo:	6598					
Prep Date:	10/22/2012	Analysis Date:	10/31/2012	SeqNo:	190746	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.847	0	87.1	75	125	0.553	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
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: 1210656

Received by/date: *MG*

10/12/12

Logged By: Michelle Garcia

10/12/2012 8:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia

10/12/2012 9:27:38 AM

Michelle Garcia

Reviewed By: *IO 10/12/12*

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH:
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ☒ No ☐ Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☒ No ☐ Checked by:

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

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

Rpt	T	Analyte	Units	Synonym	MDL	LOD	LOQ
☐	A	Aluminum	mg/Kg		0.4481	0	
☒	A	Antimony	mg/Kg		0.629	0	
☒	A	Arsenic	mg/Kg		0.6263	0	
☒	A	Barium	mg/Kg		0.0609	0	
☒	A	Beryllium	mg/Kg		0.0093	0	
☐	A	Boron	mg/Kg		0.0826	0	
☒	A	Cadmium	mg/Kg		0.0271	0	
☐	A	Calcium	mg/Kg		6.9713	0	
☒	A	Chromium	mg/Kg		0.1184	0	
☒	A	Cobalt	mg/Kg		0.0689	0	
☐	A	Copper	mg/Kg		0.2323	0	
☒	A	Iron	mg/Kg		0.7476	0	
☒	A	Lead	mg/Kg		0.2194	0	
☐	A	Magnesium	mg/Kg		0.4651	0	
☒	A	Manganese	mg/Kg		0.0212	0	
☐	A	Molybdenum	mg/Kg		0.1423	0	
☒	A	Nickel	mg/Kg		0.1668	0	
☐	A	Potassium	mg/Kg		17.3925	0	
☒	A	Selenium	mg/Kg		1.4025	0	
☒	A	Silver	mg/Kg		0.0354	0	
☐	A	Sodium	mg/Kg		8.4278	0	
☐	A	Thallium	mg/Kg		1.1557	0	
☐	A	Tin	mg/Kg		0.8261	0	
☐	A	Titanium	mg/Kg		0.0342	0	
☐	A	Uranium	mg/Kg		0.7296	0	
☒	A	Vanadium	mg/Kg		0.0565	0	
☒	A	Zinc	mg/Kg		1.0066	0	
☐	I	Yttrium	%		0	0	
☐	I	Yttrium Radial	%		0	0	
☐	X	Uranium-confirmation	mg/Kg		0	0	
☐	X	Silicon	mg/Kg		0	0	

+ Hg
+ Cu



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

November 15, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1210860

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/18/2012 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. 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. 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.

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 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:15:00 AM

Lab ID: 1210860-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 5:50:17 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2012 5:50:17 AM
Surr: DNOP	100	77.6-140		%REC	1	10/21/2012 5:50:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/27/2012 1:44:37 PM
Surr: BFB	99.5	84-116		%REC	1	10/27/2012 1:44:37 PM
EPA METHOD 7471: MERCURY						Analyst: JLF
Mercury	ND	0.033		mg/Kg	1	11/1/2012 4:09:42 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Barium	440	1.0		mg/Kg	10	10/25/2012 2:09:26 PM
Beryllium	0.80	0.30		mg/Kg	2	10/25/2012 12:21:41 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:21:41 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 12:21:41 PM
Cobalt	4.6	0.60		mg/Kg	2	10/25/2012 12:21:41 PM
Iron	15000	500		mg/Kg	500	11/2/2012 7:08:54 AM
Lead	2.5	0.50		mg/Kg	2	10/25/2012 12:21:41 PM
Manganese	450	1.0		mg/Kg	10	10/25/2012 2:09:26 PM
Nickel	8.0	1.0		mg/Kg	2	10/25/2012 12:21:41 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:23:58 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
Zinc	25	5.0		mg/Kg	2	10/25/2012 12:21:41 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
Benzyl alcohol	0.32	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:15:00 AM

Lab ID: 1210860-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 9:26:31 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 9:26:31 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 9:26:31 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:15:00 AM

Lab ID: 1210860-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 9:26:31 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:26:31 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 9:26:31 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:26:31 PM
Surr: 2,4,6-Tribromophenol	84.3	21.3-145		%REC	1	10/24/2012 9:26:31 PM
Surr: 2-Fluorobiphenyl	83.6	20-131		%REC	1	10/24/2012 9:26:31 PM
Surr: 2-Fluorophenol	76.1	11.9-130		%REC	1	10/24/2012 9:26:31 PM
Surr: 4-Terphenyl-d14	74.2	25.1-149		%REC	1	10/24/2012 9:26:31 PM
Surr: Nitrobenzene-d5	88.7	25.6-137		%REC	1	10/24/2012 9:26:31 PM
Surr: Phenol-d5	75.5	20.3-132		%REC	1	10/24/2012 9:26:31 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00213	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Toluene	0.00222	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Ethylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Xylenes, Total	0.00380	0.00160		mg/Kg	1	10/19/2012 1:07:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2,4-Trimethylbenzene	0.000935	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,3,5-Trimethylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dichloroethane (EDC)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dibromoethane (EDB)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Naphthalene	ND	0.00160		mg/Kg	1	10/19/2012 1:07:47 PM
1-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/19/2012 1:07:47 PM
2-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/19/2012 1:07:47 PM
Acetone	0.0480	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromodichloromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromoform	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Bromomethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2-Butanone	0.00846	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
Carbon tetrachloride	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Chlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Chloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:15:00 AM

Lab ID: 1210860-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Chloromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2-Chlorotoluene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Carbon disulfide	ND	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
4-Chlorotoluene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
cis-1,2-DCE	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
cis-1,3-Dichloropropene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dibromo-3-chloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Dibromochloromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Dibromomethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,3-Dichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,4-Dichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Dichlorodifluoromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1-Dichloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1-Dichloroethene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2-Dichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,3-Dichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2,2-Dichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1-Dichloropropene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Hexachlorobutadiene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Isopropylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
4-Isopropyltoluene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Methylene chloride	ND	0.00240		mg/Kg	1	10/19/2012 1:07:47 PM
n-Butylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
2-Hexanone	ND	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
n-Propylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
sec-Butylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Styrene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
4-Methyl-2-pentanone	ND	0.00799		mg/Kg	1	10/19/2012 1:07:47 PM
tert-Butylbenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,1,2-Tetrachloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,2,2-Tetrachloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Tetrachloroethene (PCE)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
trans-1,2-DCE	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
trans-1,3-Dichloropropene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2,3-Trichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,2,4-Trichlorobenzene	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,1-Trichloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
1,1,2-Trichloroethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Trichloroethene (TCE)	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Trichlorofluoromethane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:15:00 AM

Lab ID: 1210860-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Vinyl chloride	ND	0.000799		mg/Kg	1	10/19/2012 1:07:47 PM
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%REC	1	10/19/2012 1:07:47 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/19/2012 1:07:47 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/19/2012 1:07:47 PM
Surr: Toluene-d8	93.6	70-130		%REC	1	10/19/2012 1:07:47 PM

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- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:30:00 AM

Lab ID: 1210860-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/19/2012 1:24:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/19/2012 1:24:09 PM
Surr: DNOP	95.6	77.6-140		%REC	1	10/19/2012 1:24:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/27/2012 1:15:50 PM
Surr: BFB	96.3	84-116		%REC	1	10/27/2012 1:15:50 PM
EPA METHOD 7471: MERCURY						Analyst: JLF
Mercury	ND	0.033		mg/Kg	1	11/1/2012 4:11:28 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Barium	43	0.20		mg/Kg	2	10/25/2012 12:26:50 PM
Beryllium	0.83	0.30		mg/Kg	2	10/25/2012 12:26:50 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:26:50 PM
Chromium	7.8	0.60		mg/Kg	2	10/25/2012 12:26:50 PM
Cobalt	3.5	0.60		mg/Kg	2	10/25/2012 12:26:50 PM
Iron	16000	500		mg/Kg	500	11/2/2012 7:21:58 AM
Lead	3.3	0.50		mg/Kg	2	10/25/2012 12:26:50 PM
Manganese	230	1.0		mg/Kg	10	10/25/2012 2:14:32 PM
Nickel	6.4	1.0		mg/Kg	2	10/25/2012 12:26:50 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:26:49 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 12:26:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM

Qualifiers:

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:30:00 AM

Lab ID: 1210860-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 9:56:18 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 9:56:18 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 9:56:18 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:30:00 AM

Lab ID: 1210860-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 9:56:18 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 9:56:18 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 9:56:18 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 9:56:18 PM
Surr: 2,4,6-Tribromophenol	73.3	21.3-145		%REC	1	10/24/2012 9:56:18 PM
Surr: 2-Fluorobiphenyl	72.5	20-131		%REC	1	10/24/2012 9:56:18 PM
Surr: 2-Fluorophenol	71.3	11.9-130		%REC	1	10/24/2012 9:56:18 PM
Surr: 4-Terphenyl-d14	65.3	25.1-149		%REC	1	10/24/2012 9:56:18 PM
Surr: Nitrobenzene-d5	86.0	25.6-137		%REC	1	10/24/2012 9:56:18 PM
Surr: Phenol-d5	72.1	20.3-132		%REC	1	10/24/2012 9:56:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00129	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Toluene	0.000908	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Ethylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Xylenes, Total	ND	0.00156		mg/Kg	1	10/19/2012 1:38:40 PM
Methyl tert-butyl ether (MTBE)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2,4-Trimethylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,3,5-Trimethylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dichloroethane (EDC)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dibromoethane (EDB)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Naphthalene	ND	0.00156		mg/Kg	1	10/19/2012 1:38:40 PM
1-Methylnaphthalene	ND	0.00313		mg/Kg	1	10/19/2012 1:38:40 PM
2-Methylnaphthalene	ND	0.00313		mg/Kg	1	10/19/2012 1:38:40 PM
Acetone	0.0202	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromodichloromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromoform	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Bromomethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2-Butanone	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
Carbon tetrachloride	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Chlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Chloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:30:00 AM

Lab ID: 1210860-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Chloromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2-Chlorotoluene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Carbon disulfide	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
4-Chlorotoluene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
cis-1,2-DCE	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
cis-1,3-Dichloropropene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dibromo-3-chloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Dibromochloromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Dibromomethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,3-Dichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,4-Dichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Dichlorodifluoromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1-Dichloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1-Dichloroethene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2-Dichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,3-Dichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2,2-Dichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1-Dichloropropene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Hexachlorobutadiene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Isopropylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
4-Isopropyltoluene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Methylene chloride	ND	0.00235		mg/Kg	1	10/19/2012 1:38:40 PM
n-Butylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
2-Hexanone	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
n-Propylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
sec-Butylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Styrene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
4-Methyl-2-pentanone	ND	0.00782		mg/Kg	1	10/19/2012 1:38:40 PM
tert-Butylbenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,1,2-Tetrachloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,2,2-Tetrachloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Tetrachloroethene (PCE)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
trans-1,2-DCE	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
trans-1,3-Dichloropropene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2,3-Trichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,2,4-Trichlorobenzene	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,1-Trichloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
1,1,2-Trichloroethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Trichloroethene (TCE)	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Trichlorofluoromethane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-24 (1.5-2')

Project: SWMU NO.14

Collection Date: 10/17/2012 10:30:00 AM

Lab ID: 1210860-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Vinyl chloride	ND	0.000782		mg/Kg	1	10/19/2012 1:38:40 PM
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	10/19/2012 1:38:40 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%REC	1	10/19/2012 1:38:40 PM
Surr: Dibromofluoromethane	97.2	70-130		%REC	1	10/19/2012 1:38:40 PM
Surr: Toluene-d8	90.9	70-130		%REC	1	10/19/2012 1:38:40 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101712

Project: SWMU NO.14

Collection Date: 10/17/2012 11:00:00 AM

Lab ID: 1210860-003

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/20/2012 1:57:39 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/20/2012 1:57:39 AM
Surr: DNOP	98.9	79.5-166		%REC	1	10/20/2012 1:57:39 AM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	ND	0.10		mg/L	1	10/18/2012 2:51:00 PM
Chloride	ND	0.50		mg/L	1	10/18/2012 2:51:00 PM
Sulfate	ND	0.50		mg/L	1	10/18/2012 2:51:00 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Beryllium	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Chromium	ND	0.0060		mg/L	1	10/24/2012 10:58:41 AM
Cobalt	ND	0.0060		mg/L	1	10/24/2012 10:58:41 AM
Iron	ND	0.020		mg/L	1	10/30/2012 10:09:01 AM
Manganese	ND	0.0020		mg/L	1	10/24/2012 10:58:41 AM
Nickel	ND	0.010		mg/L	1	10/24/2012 10:58:41 AM
Silver	ND	0.0050		mg/L	1	10/24/2012 10:58:41 AM
Vanadium	ND	0.050		mg/L	1	10/24/2012 10:58:41 AM
Zinc	ND	0.010		mg/L	1	10/24/2012 10:58:41 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 7:22:08 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:56:59 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Aniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Anthracene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 8:17:14 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 8:17:14 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101712

Project: SWMU NO.14

Collection Date: 10/17/2012 11:00:00 AM

Lab ID: 1210860-003

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Carbazole	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Chrysene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 8:17:14 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Fluorene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Isophorone	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 8:17:14 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101712

Project: SWMU NO.14

Collection Date: 10/17/2012 11:00:00 AM

Lab ID: 1210860-003

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 8:17:14 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Phenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Pyrene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Pyridine	ND	10		µg/L	1	10/22/2012 8:17:14 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:17:14 PM
Surr: 2,4,6-Tribromophenol	79.5	42.9-124		%REC	1	10/22/2012 8:17:14 PM
Surr: 2-Fluorobiphenyl	72.6	40-108		%REC	1	10/22/2012 8:17:14 PM
Surr: 2-Fluorophenol	52.9	23.6-94.8		%REC	1	10/22/2012 8:17:14 PM
Surr: 4-Terphenyl-d14	72.0	41.9-103		%REC	1	10/22/2012 8:17:14 PM
Surr: Nitrobenzene-d5	71.9	42.6-114		%REC	1	10/22/2012 8:17:14 PM
Surr: Phenol-d5	39.3	20.3-74.7		%REC	1	10/22/2012 8:17:14 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Toluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Ethylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Naphthalene	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 5:03:12 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 5:03:12 PM
Acetone	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Bromobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Bromoform	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Bromomethane	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
2-Butanone	ND	10		µg/L	1	10/19/2012 5:03:12 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101712

Project: SWMU NO.14

Collection Date: 10/17/2012 11:00:00 AM

Lab ID: 1210860-003

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Chlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Chloroethane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Chloroform	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Chloromethane	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Dibromomethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
2-Hexanone	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/19/2012 5:03:12 PM
Methylene Chloride	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/19/2012 5:03:12 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Styrene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101712

Project: SWMU NO.14

Collection Date: 10/17/2012 11:00:00 AM

Lab ID: 1210860-003

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/19/2012 5:03:12 PM
Vinyl chloride	ND	1.0		µg/L	1	10/19/2012 5:03:12 PM
Xylenes, Total	ND	1.5		µg/L	1	10/19/2012 5:03:12 PM
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	10/19/2012 5:03:12 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1	10/19/2012 5:03:12 PM
Surr: Dibromofluoromethane	98.0	70-130		%REC	1	10/19/2012 5:03:12 PM
Surr: Toluene-d8	113	70-130		%REC	1	10/19/2012 5:03:12 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/21/2012 1:50:20 PM
Surr: BFB	98.2	70-130		%REC	1	10/21/2012 1:50:20 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-OAPIS-1GW

Project: SWMU NO.14

Collection Date: 10/16/2012 9:00:00 AM

Lab ID: 1210860-004

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/20/2012 2:22:46 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/20/2012 2:22:46 AM
Surr: DNOP	103	79.5-166		%REC	1	10/20/2012 2:22:46 AM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	ND	0.10		mg/L	1	10/18/2012 2:26:11 PM
Chloride	ND	0.50		mg/L	1	10/18/2012 2:26:11 PM
Sulfate	ND	0.50		mg/L	1	10/18/2012 2:26:11 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	0.68	0.0020		mg/L	1	10/24/2012 11:16:26 AM
Beryllium	ND	0.0020		mg/L	1	10/24/2012 11:16:26 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2012 11:16:26 AM
Chromium	0.012	0.0060		mg/L	1	10/24/2012 11:16:26 AM
Cobalt	0.044	0.0060		mg/L	1	10/24/2012 11:16:26 AM
Iron	5.6	0.20	*	mg/L	10	10/26/2012 3:07:03 PM
Manganese	2.0	0.010	*	mg/L	5	10/24/2012 11:19:39 AM
Nickel	0.13	0.010	*	mg/L	1	10/24/2012 11:16:26 AM
Silver	ND	0.0050		mg/L	1	10/24/2012 11:16:26 AM
Vanadium	ND	0.050		mg/L	1	10/24/2012 11:16:26 AM
Zinc	0.099	0.010		mg/L	1	10/24/2012 11:16:26 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
Arsenic	0.0085	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
Lead	0.010	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
Selenium	0.016	0.0025		mg/L	2.5	10/24/2012 3:08:04 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:58:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Aniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Anthracene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 8:46:44 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 8:46:44 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-OAPIS-1GW

Project: SWMU NO.14

Collection Date: 10/16/2012 9:00:00 AM

Lab ID: 1210860-004

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Carbazole	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Chrysene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 8:46:44 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Fluorene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Isophorone	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 8:46:44 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-OAPIS-1GW

Project: SWMU NO.14

Collection Date: 10/16/2012 9:00:00 AM

Lab ID: 1210860-004

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 8:46:44 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Phenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Pyrene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Pyridine	ND	10		µg/L	1	10/22/2012 8:46:44 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 8:46:44 PM
Surr: 2,4,6-Tribromophenol	76.2	42.9-124		%REC	1	10/22/2012 8:46:44 PM
Surr: 2-Fluorobiphenyl	75.3	40-108		%REC	1	10/22/2012 8:46:44 PM
Surr: 2-Fluorophenol	60.6	23.6-94.8		%REC	1	10/22/2012 8:46:44 PM
Surr: 4-Terphenyl-d14	77.9	41.9-103		%REC	1	10/22/2012 8:46:44 PM
Surr: Nitrobenzene-d5	90.4	42.6-114		%REC	1	10/22/2012 8:46:44 PM
Surr: Phenol-d5	45.7	20.3-74.7		%REC	1	10/22/2012 8:46:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	13	10		µg/L	10	10/19/2012 6:35:45 PM
Toluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Ethylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Methyl tert-butyl ether (MTBE)	440	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Naphthalene	ND	20		µg/L	10	10/19/2012 6:35:45 PM
1-Methylnaphthalene	ND	40		µg/L	10	10/19/2012 6:35:45 PM
2-Methylnaphthalene	ND	40		µg/L	10	10/19/2012 6:35:45 PM
Acetone	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Bromobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Bromodichloromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Bromoform	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Bromomethane	ND	30		µg/L	10	10/19/2012 6:35:45 PM
2-Butanone	ND	100		µg/L	10	10/19/2012 6:35:45 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-OAPIS-1GW

Project: SWMU NO.14

Collection Date: 10/16/2012 9:00:00 AM

Lab ID: 1210860-004

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Carbon Tetrachloride	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Chlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Chloroethane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Chloroform	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Chloromethane	ND	30		µg/L	10	10/19/2012 6:35:45 PM
2-Chlorotoluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
4-Chlorotoluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
cis-1,2-DCE	ND	10		µg/L	10	10/19/2012 6:35:45 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Dibromochloromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Dibromomethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Dichlorodifluoromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1-Dichloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1-Dichloroethene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2-Dichloropropane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,3-Dichloropropane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
2,2-Dichloropropane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
1,1-Dichloropropene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Hexachlorobutadiene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
2-Hexanone	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Isopropylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
4-Isopropyltoluene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	10/19/2012 6:35:45 PM
Methylene Chloride	ND	30		µg/L	10	10/19/2012 6:35:45 PM
n-Butylbenzene	ND	30		µg/L	10	10/19/2012 6:35:45 PM
n-Propylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
sec-Butylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Styrene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
tert-Butylbenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
trans-1,2-DCE	ND	10		µg/L	10	10/19/2012 6:35:45 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-OAPIS-1GW

Project: SWMU NO.14

Collection Date: 10/16/2012 9:00:00 AM

Lab ID: 1210860-004

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Trichloroethene (TCE)	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Trichlorofluoromethane	ND	10		µg/L	10	10/19/2012 6:35:45 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	10/19/2012 6:35:45 PM
Vinyl chloride	ND	10		µg/L	10	10/19/2012 6:35:45 PM
Xylenes, Total	ND	15		µg/L	10	10/19/2012 6:35:45 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	10	10/19/2012 6:35:45 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	10	10/19/2012 6:35:45 PM
Surr: Dibromofluoromethane	92.5	70-130		%REC	10	10/19/2012 6:35:45 PM
Surr: Toluene-d8	110	70-130		%REC	10	10/19/2012 6:35:45 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	10/22/2012 1:13:58 AM
Surr: BFB	94.3	70-130		%REC	10	10/22/2012 1:13:58 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101612

Project: SWMU NO.14

Collection Date: 10/16/2012 5:20:00 PM

Lab ID: 1210860-005

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/20/2012 2:47:36 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/20/2012 2:47:36 AM
Surr: DNOP	99.6	79.5-166		%REC	1	10/20/2012 2:47:36 AM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	2.9	0.50		mg/L	5	10/18/2012 4:05:28 PM
Chloride	1900	100		mg/L	200	10/19/2012 1:10:23 PM
Sulfate	100	2.5		mg/L	5	10/18/2012 4:05:28 PM
EPA METHOD 200.7: METALS						Analyst: ELS
Barium	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Beryllium	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Chromium	ND	0.0060		mg/L	1	10/24/2012 11:32:58 AM
Cobalt	0.0072	0.0060		mg/L	1	10/24/2012 11:32:58 AM
Iron	ND	0.020		mg/L	1	11/5/2012 1:26:43 PM
Manganese	ND	0.0020		mg/L	1	10/24/2012 11:32:58 AM
Nickel	ND	0.010		mg/L	1	10/24/2012 11:32:58 AM
Silver	ND	0.0050		mg/L	1	10/24/2012 11:32:58 AM
Vanadium	ND	0.050		mg/L	1	10/24/2012 11:32:58 AM
Zinc	ND	0.010		mg/L	1	10/24/2012 11:32:58 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 7:26:04 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 8:00:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Aniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Anthracene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 9:16:11 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 9:16:11 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101612

Project: SWMU NO.14

Collection Date: 10/16/2012 5:20:00 PM

Lab ID: 1210860-005

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Carbazole	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Chrysene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 9:16:11 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Fluorene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Isophorone	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 9:16:11 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101612

Project: SWMU NO.14

Collection Date: 10/16/2012 5:20:00 PM

Lab ID: 1210860-005

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 9:16:11 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Phenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Pyrene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Pyridine	ND	10		µg/L	1	10/22/2012 9:16:11 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 9:16:11 PM
Surr: 2,4,6-Tribromophenol	77.4	42.9-124		%REC	1	10/22/2012 9:16:11 PM
Surr: 2-Fluorobiphenyl	69.2	40-108		%REC	1	10/22/2012 9:16:11 PM
Surr: 2-Fluorophenol	48.2	23.6-94.8		%REC	1	10/22/2012 9:16:11 PM
Surr: 4-Terphenyl-d14	66.3	41.9-103		%REC	1	10/22/2012 9:16:11 PM
Surr: Nitrobenzene-d5	74.3	42.6-114		%REC	1	10/22/2012 9:16:11 PM
Surr: Phenol-d5	39.2	20.3-74.7		%REC	1	10/22/2012 9:16:11 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Toluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Ethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Naphthalene	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:06:33 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:06:33 PM
Acetone	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Bromobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Bromoform	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Bromomethane	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
2-Butanone	ND	10		µg/L	1	10/19/2012 7:06:33 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101612

Project: SWMU NO.14

Collection Date: 10/16/2012 5:20:00 PM

Lab ID: 1210860-005

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Chlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Chloroethane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Chloroform	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Chloromethane	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Dibromomethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
2-Hexanone	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/19/2012 7:06:33 PM
Methylene Chloride	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/19/2012 7:06:33 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Styrene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101612

Project: SWMU NO.14

Collection Date: 10/16/2012 5:20:00 PM

Lab ID: 1210860-005

Matrix: AQUEOUS

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/19/2012 7:06:33 PM
Vinyl chloride	ND	1.0		µg/L	1	10/19/2012 7:06:33 PM
Xylenes, Total	ND	1.5		µg/L	1	10/19/2012 7:06:33 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	10/19/2012 7:06:33 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/19/2012 7:06:33 PM
Surr: Dibromofluoromethane	97.0	70-130		%REC	1	10/19/2012 7:06:33 PM
Surr: Toluene-d8	117	70-130		%REC	1	10/19/2012 7:06:33 PM
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/21/2012 2:18:53 PM
Surr: BFB	83.5	70-130		%REC	1	10/21/2012 2:18:53 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: SWMU NO.14

Collection Date:

Lab ID: 1210860-006

Matrix: TRIP BLANK

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/21/2012 2:08:01 AM
Toluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Ethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Naphthalene	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:37:20 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/19/2012 7:37:20 PM
Acetone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Bromobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Bromoform	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Bromomethane	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
2-Butanone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Carbon disulfide	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Chlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Chloroethane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Chloroform	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Chloromethane	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Dibromomethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210860

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: SWMU NO.14

Collection Date:

Lab ID: 1210860-006

Matrix: TRIP BLANK

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
MODIFIED EPA METHOD 8015B: GASOLINE RANGE						Analyst: DJF
2-Hexanone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/19/2012 7:37:20 PM
Methylene Chloride	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/19/2012 7:37:20 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Styrene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/19/2012 7:37:20 PM
Vinyl chloride	ND	1.0		µg/L	1	10/19/2012 7:37:20 PM
Xylenes, Total	ND	1.5		µg/L	1	10/19/2012 7:37:20 PM
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: Dibromofluoromethane	88.3	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: Toluene-d8	113	70-130		%REC	1	10/19/2012 7:37:20 PM
Surr: BFB	97.7	70-130		%REC	1	10/21/2012 2:08:01 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Anatek Labs, Inc.

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

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

Batch #: 121019048
Project Name: 1210860

Analytical Results Report

Sample Number	121019048-001	Sampling Date	10/17/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210860-001D / SWMU 14-24 (0-0.5)	Sampling Time	10:15 AM		
Matrix	Soil				
Comments					

Sample Number	121019048-002	Sampling Date	10/17/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210860-002D / SWMU 14-24 (1.5-2)	Sampling Time	10:30 AM		
Matrix	Soil				
Comments					

Sample Number	121019048-003	Sampling Date	10/17/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210860-003F / EB101712	Sampling Time	11:00 AM		
Matrix	Water				
Comments					

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

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 #: 121019048
Project Name: 1210860

Analytical Results Report

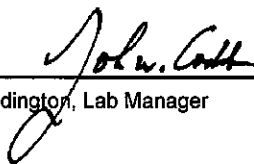
Sample Number 121019048-004 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-004F / SWMU 14-
OAPIS-1GW **Sampling Time** 9:00 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0899	mg/L	0.01	10/29/2012	CRW	EPA 335.4	

Sample Number 121019048-005 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210860-005F / EB101612 **Sampling Time** 5:20 PM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/29/2012	CRW	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.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R6448		RunNo:	6448			
Prep Date:			Analysis Date:	10/24/2012		SeqNo:	185486	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	R6448		RunNo:	6448			
Prep Date:			Analysis Date:	10/24/2012		SeqNo:	185487	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.3	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Cobalt	0.47	0.0060	0.5000	0	94.4	85	115			
Manganese	0.48	0.0020	0.5000	0	95.2	85	115			
Nickel	0.46	0.010	0.5000	0	92.9	85	115			
Silver	0.099	0.0050	0.1000	0	98.7	85	115			
Vanadium	0.52	0.050	0.5000	0	103	85	115			
Zinc	0.49	0.010	0.5000	0	98.7	85	115			

Sample ID	1210860-005EMS		SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	EB101612		Batch ID:	R6448		RunNo:	6448			
Prep Date:			Analysis Date:	10/24/2012		SeqNo:	185584	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0.0005100	101	70	130			
Beryllium	0.54	0.0020	0.5000	0	108	70	130			
Cadmium	0.52	0.0020	0.5000	0	104	70	130			
Chromium	0.50	0.0060	0.5000	0	99.8	70	130			
Cobalt	0.49	0.0060	0.5000	0.007250	96.8	70	130			
Manganese	0.49	0.0020	0.5000	0	98.4	70	130			
Nickel	0.48	0.010	0.5000	0	95.8	70	130			
Silver	0.10	0.0050	0.1000	0	103	70	130			
Vanadium	0.53	0.050	0.5000	0	106	70	130			
Zinc	0.50	0.010	0.5000	0	101	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210860-005EMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	EB101612		Batch ID:	R6448		RunNo:	6448			
Prep Date:			Analysis Date:	10/24/2012		SeqNo:	185585		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0.0005100	100	70	130	0.371	20	
Beryllium	0.54	0.0020	0.5000	0	108	70	130	0.157	20	
Cadmium	0.52	0.0020	0.5000	0	104	70	130	0.178	20	
Chromium	0.50	0.0060	0.5000	0	99.3	70	130	0.460	20	
Cobalt	0.49	0.0060	0.5000	0.007250	96.4	70	130	0.406	20	
Manganese	0.49	0.0020	0.5000	0	98.0	70	130	0.393	20	
Nickel	0.48	0.010	0.5000	0	95.4	70	130	0.513	20	
Silver	0.10	0.0050	0.1000	0	103	70	130	0.0872	20	
Vanadium	0.53	0.050	0.5000	0	106	70	130	0.179	20	
Zinc	0.50	0.010	0.5000	0	99.4	70	130	1.40	20	

Sample ID	MB-4467		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	4467		RunNo:	6517			
Prep Date:	10/23/2012		Analysis Date:	10/26/2012		SeqNo:	188054		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS-4467		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	4467		RunNo:	6517			
Prep Date:	10/23/2012		Analysis Date:	10/26/2012		SeqNo:	188055		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	99.0	85	115			

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R6577		RunNo:	6577			
Prep Date:			Analysis Date:	10/30/2012		SeqNo:	189771		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	R6577		RunNo:	6577			
Prep Date:			Analysis Date:	10/30/2012		SeqNo:	189772		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.52	0.020	0.5000	0	104	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4467		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	4467		RunNo:	6448			
Prep Date:	10/23/2012		Analysis Date:	10/24/2012		SeqNo:	191046		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Beryllium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Manganese	ND	0.0020								
Nickel	ND	0.010								
Silver	ND	0.0050								
Vanadium	ND	0.050								
Zinc	ND	0.010								

Sample ID	LCS-4467		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	4467		RunNo:	6448			
Prep Date:	10/23/2012		Analysis Date:	10/24/2012		SeqNo:	191048		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.3	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.7	85	115			
Chromium	0.48	0.0060	0.5000	0	96.3	85	115			
Cobalt	0.46	0.0060	0.5000	0	92.3	85	115			
Manganese	0.47	0.0020	0.5000	0	93.4	85	115			
Nickel	0.46	0.010	0.5000	0	91.2	85	115			
Silver	0.087	0.0050	0.1000	0	86.5	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			
Zinc	0.48	0.010	0.5000	0	95.6	85	115			

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R6689		RunNo:	6689			
Prep Date:			Analysis Date:	11/5/2012		SeqNo:	193297		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								

Sample ID	LCS		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	R6689		RunNo:	6689			
Prep Date:			Analysis Date:	11/5/2012		SeqNo:	193298		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.0	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210860-005EMS		SampType: MS		TestCode: EPA Method 200.7: Metals					
Client ID:	EB101612		Batch ID: R6689		RunNo: 6689					
Prep Date:			Analysis Date: 11/5/2012		SeqNo: 193607		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	100	70	130			

Sample ID	1210860-005EMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	EB101612			Batch ID:	R6689		RunNo:	6689			
Prep Date:				Analysis Date:	11/5/2012		SeqNo:	193608		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Iron	0.50	0.020	0.5000	0	100	70	130	0.290	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4467		SampType:	MBLK		TestCode:	EPA 200.8: Metals			
Client ID:	PBW		Batch ID:	4467		RunNo:	6466			
Prep Date:	10/23/2012		Analysis Date:	10/24/2012		SeqNo:	185968		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0025								
Arsenic	ND	0.0025								
Lead	ND	0.0025								
Selenium	ND	0.0025								

Sample ID	1209C98-001AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186650		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.031	0.0010	0.02500	0.005774	102	70	130			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Metals			
Client ID:	LCSW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186664		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Metals			
Client ID:	LCSW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186665		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	104	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	106	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Metals			
Client ID:	PBW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186667		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Metals			
Client ID:	PBW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186668	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	1210516-002BMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	187056	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0	102	70	130			
Lead	0.029	0.0010	0.02500	0.002703	104	70	130			
Selenium	0.026	0.0010	0.02500	0	102	70	130			

Sample ID	1210544-001CMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	187059	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	98.2	70	130			
Arsenic	0.027	0.0010	0.02500	0.001693	101	70	130			
Selenium	0.026	0.0010	0.02500	0.001046	100	70	130			

Sample ID	1210724-001AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	187071	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.048	0.0010	0.02500	0.02319	99.5	70	130			

Sample ID	1210724-010AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	187081	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.029	0.0010	0.02500	0.004033	101	70	130			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Metals			
Client ID:	LCSW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	187100	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R6483		RunNo: 6483					
Prep Date:			Analysis Date: 10/25/2012		SeqNo: 187100		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.9	85	115			
Arsenic	0.025	0.0010	0.02500	0	100	85	115			
Lead	0.026	0.0010	0.02500	0	104	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	LCS	SampType: LCS			TestCode: EPA 200.8: Metals					
Client ID:	LCSW	Batch ID: R6483			RunNo: 6483					
Prep Date:		Analysis Date: 10/25/2012			SeqNo: 187101		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.024	0.0010	0.02500	0	96.2	85	115			
Arsenic	0.025	0.0010	0.02500	0	99.5	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R6483			RunNo: 6483					
Prep Date:		Analysis Date: 10/25/2012			SeqNo: 187102		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Metals					
Client ID:	PBW	Batch ID: R6483			RunNo: 6483					
Prep Date:		Analysis Date: 10/25/2012			SeqNo: 187103		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4503		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186274		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-4503		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186276		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120			

Sample ID	1210675-003BMS		SampType: ms		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186299		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	83.0	75	125			

Sample ID	1210675-003BMSD			SampType:	msd		TestCode:	EPA Method 245.1: Mercury			
Client ID:	BatchQC			Batch ID:	4503		RunNo:	6470			
Prep Date:	10/24/2012		Analysis Date:	10/24/2012		SeqNo:	186300		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0040	0.00020	0.005000	0	80.1	75	125	3.62	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
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P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R6352	RunNo:	6352					
Prep Date:		Analysis Date:	10/18/2012	SeqNo:	182755	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R6352	RunNo:	6352					
Prep Date:		Analysis Date:	10/18/2012	SeqNo:	182756	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.3	90	110			
Chloride	5.1	0.50	5.000	0	102	90	110			
Sulfate	10	0.50	10.00	0	100	90	110			

Sample ID	1210862-002BMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R6352	RunNo:	6352					
Prep Date:		Analysis Date:	10/18/2012	SeqNo:	182769	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.78	0.10	0.5000	0	157	76.6	110			S
Chloride	8.3	0.50	5.000	4.950	66.3	87.8	111			S
Sulfate	71	0.50	10.00	52.29	185	84.6	122			SE

Sample ID	1210862-002BMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R6352	RunNo:	6352					
Prep Date:		Analysis Date:	10/18/2012	SeqNo:	182770	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.78	0.10	0.5000	0	155	76.6	110	0.813	20	S
Chloride	8.2	0.50	5.000	4.950	65.9	87.8	111	0.230	20	S
Sulfate	71	0.50	10.00	52.29	184	84.6	122	0.106	20	SE

Sample ID	1210860-003CMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	EB101712	Batch ID:	R6352	RunNo:	6352					
Prep Date:		Analysis Date:	10/18/2012	SeqNo:	182775	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.5	76.6	110			
Chloride	4.9	0.50	5.000	0	98.4	87.8	111			
Sulfate	9.6	0.50	10.00	0	96.3	84.6	122			

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210860-003CMSD			SampType:	MSD		TestCode:	EPA Method 300.0: Anions			
Client ID:	EB101712			Batch ID:	R6352		RunNo:	6352			
Prep Date:				Analysis Date:	10/18/2012		SeqNo:	182776		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Fluoride	0.49	0.10	0.5000	0	98.1	76.6	110	0.572	20		
Chloride	4.9	0.50	5.000	0	98.3	87.8	111	0.126	20		
Sulfate	9.7	0.50	10.00	0	97.3	84.6	122	1.05	20		

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R6364			RunNo: 6364					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 183032		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R6364		RunNo: 6364					
Prep Date:			Analysis Date: 10/19/2012		SeqNo: 183033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.1	0.50	5.000	0	102	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4397	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4397			RunNo: 6325					
Prep Date:	10/18/2012	Analysis Date: 10/18/2012			SeqNo: 182283		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		103	77.6	140			

Sample ID	LCS-4397		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4397		RunNo: 6325					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182284		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	52.6	130			
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID	MB-4404	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4404			RunNo: 6356					
Prep Date:	10/18/2012	Analysis Date: 10/19/2012			SeqNo: 182984		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID	LCS-4404		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182985		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID	1210819-001AMS		SampType: MS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183001		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	1210819-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183002		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4430		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW		Batch ID: 4430		RunNo: 6372					
Prep Date:	10/19/2012		Analysis Date: 10/20/2012		SeqNo: 183215		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.98		1.000		98.2	79.5	166			

Sample ID	LCS-4430		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 4430		RunNo: 6372					
Prep Date:	10/19/2012		Analysis Date: 10/20/2012		SeqNo: 183216		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.5	1.0	5.000	0	90.1	74	157			
Surr: DNOP	0.60		0.5000		121	79.5	166			

Sample ID	LCSD-4430		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 4430		RunNo: 6372					
Prep Date:	10/19/2012		Analysis Date: 10/20/2012		SeqNo: 183217		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.6	1.0	5.000	0	91.2	74	157	1.18	23	
Surr: DNOP	0.61		0.5000		122	79.5	166	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4510		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4510		RunNo: 6518					
Prep Date:	10/24/2012		Analysis Date: 10/27/2012		SeqNo: 188108		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		96.6	84	116			

Sample ID	LCS-4510		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4510		RunNo: 6518					
Prep Date:	10/24/2012		Analysis Date: 10/27/2012		SeqNo: 188109		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		103	84	116			

Sample ID	1210A72-002AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4510		RunNo: 6518					
Prep Date:	10/24/2012		Analysis Date: 10/27/2012		SeqNo: 188121		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.65	2.267	96.2	70	130			
Surr: BFB	1100		986.2		109	84	116			

Sample ID	1210A72-002AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4510		RunNo: 6518					
Prep Date:	10/24/2012		Analysis Date: 10/27/2012		SeqNo: 188122		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.61	2.267	96.0	70	130	0.425	22.1	
Surr: BFB	1100		984.3		107	84	116	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4419		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	4419		RunNo:	6365			
Prep Date:	10/19/2012		Analysis Date:	10/19/2012		SeqNo:	183060		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								
1,4-Dichlorobenzene	ND	0.00100								
Dichlorodifluoromethane	ND	0.00100								
1,1-Dichloroethane	ND	0.00100								
1,1-Dichloroethene	ND	0.00100								
1,2-Dichloropropane	ND	0.00100								
1,3-Dichloropropane	ND	0.00100								
2,2-Dichloropropane	ND	0.00100								
1,1-Dichloropropene	ND	0.00100								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4419		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4419		RunNo: 6365					
Prep Date:	10/19/2012		Analysis Date: 10/19/2012		SeqNo: 183060		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.00100								
Isopropylbenzene	ND	0.00100								
4-Isopropyltoluene	ND	0.00100								
Methylene chloride	0.00320	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.7		50.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		85.9	70	130			
Surr: Dibromofluoromethane	50.0		50.00		100	70	130			
Surr: Toluene-d8	51.0		50.00		102	70	130			

Sample ID	lcs-4419		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4419		RunNo: 6365					
Prep Date:	10/19/2012		Analysis Date: 10/19/2012		SeqNo: 183062		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.7	1.00	12.50	0	93.9	60	140			
Toluene	10.2	1.00	12.50	0	82.0	60	140			
Chlorobenzene	11.9	1.00	12.50	0	94.9	60	140			
1,1-Dichloroethene	14.5	1.00	12.50	0	116	60	140			
Trichloroethene (TCE)	9.39	1.00	12.50	0	75.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.4		50.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	41.6		50.00		83.2	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	lcs-4419		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4419		RunNo: 6365					
Prep Date:	10/19/2012		Analysis Date: 10/19/2012		SeqNo: 183062		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	46.8		50.00		93.6	70	130			
Surr: Toluene-d8	46.1		50.00		92.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6386			RunNo: 6386					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 183508		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	5ml-rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6386			RunNo: 6386					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 183508		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.1		10.00		91.2	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R6386			RunNo: 6386					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 183534		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.6	70	130			
Toluene	18	1.0	20.00	0	92.4	80	120			
Chlorobenzene	19	1.0	20.00	0	95.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.1	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	83.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		115	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R6386		RunNo:	6386			
Prep Date:			Analysis Date:	10/19/2012		SeqNo:	183534	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	8.1		10.00		81.3	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID	1210860-003a ms		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	EB101712		Batch ID:	R6386		RunNo:	6386			
Prep Date:			Analysis Date:	10/19/2012		SeqNo:	183536	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.2	66.8	128			
Toluene	19	1.0	20.00	0	95.7	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0.4600	82.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.3	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		88.5	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.2	70	130			
Surr: Toluene-d8	11		10.00		109	70	130			

Sample ID	1210860-003a msd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	EB101712		Batch ID:	R6386		RunNo:	6386			
Prep Date:			Analysis Date:	10/19/2012		SeqNo:	183559	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.6	66.8	128	4.84	16.7	
Toluene	18	1.0	20.00	0	91.3	70	130	4.75	18.7	
Chlorobenzene	19	1.0	20.00	0	95.3	70	130	5.49	19.5	
1,1-Dichloroethene	19	1.0	20.00	0	93.4	70	130	10.5	16.7	
Trichloroethene (TCE)	16	1.0	20.00	0.4600	77.0	70	130	6.12	17.5	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130	0	0	
Surr: Dibromofluoromethane	8.4		10.00		84.4	70	130	0	0	
Surr: Toluene-d8	11		10.00		106	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-4422	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 4422			RunNo: 6445					
Prep Date:	10/19/2012	Analysis Date: 10/23/2012			SeqNo: 185414		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	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Sample ID	mb-4422		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185416		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	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4422	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185416	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.50								
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	0.50								
2,4-Dinitrophenol	ND	0.40								
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	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
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								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4422		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185416		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
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	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID	1210858-004Cms		SampType: MS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	BatchQC		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185433		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210858-004Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185434	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4411		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 4411		RunNo: 6416					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012		SeqNo: 184532		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-4411		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 4411			RunNo: 6416				
Prep Date:	10/19/2012		Analysis Date: 10/22/2012			SeqNo: 184532		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	180		200.0		89.0	42.9	124			
Surr: 2-Fluorobiphenyl	74		100.0		73.7	40	108			
Surr: 2-Fluorophenol	130		200.0		63.3	23.6	94.8			
Surr: 4-Terphenyl-d14	75		100.0		74.5	41.9	103			
Surr: Nitrobenzene-d5	91		100.0		90.8	42.6	114			
Surr: Phenol-d5	100		200.0		49.9	20.3	74.7			

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	Ics-4411	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 4411			RunNo: 6416					
Prep Date:	10/19/2012	Analysis Date: 10/22/2012			SeqNo: 184533		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	69.3	43.3	92			
4-Chloro-3-methylphenol	150	10	200.0	0	72.7	46.3	108			
2-Chlorophenol	130	10	200.0	0	65.3	38	99.3			
1,4-Dichlorobenzene	62	10	100.0	0	61.6	30.8	80.6			
2,4-Dinitrotoluene	73	10	100.0	0	73.1	46.1	117			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	39.3	110			
4-Nitrophenol	80	10	200.0	0	39.8	29.8	67			
Pentachlorophenol	110	20	200.0	0	55.3	32.2	95.7			
Phenol	78	10	200.0	0	39.2	27	64.8			
Pyrene	72	10	100.0	0	71.5	44.7	97.3			
1,2,4-Trichlorobenzene	73	10	100.0	0	72.7	36.6	86.7			
Surr: 2,4,6-Tribromophenol	170		200.0		87.4	42.9	124			
Surr: 2-Fluorobiphenyl	81		100.0		81.3	40	108			
Surr: 2-Fluorophenol	120		200.0		60.0	23.6	94.8			
Surr: 4-Terphenyl-d14	74		100.0		74.1	41.9	103			
Surr: Nitrobenzene-d5	85		100.0		84.8	42.6	114			
Surr: Phenol-d5	100		200.0		50.3	20.3	74.7			

Sample ID	Icsd-4411		SampType: LCSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 4411			RunNo: 6416					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012			SeqNo: 184535		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Acenaphthene	63	10	100.0	0	62.5	43.3	92	10.3	25		
4-Chloro-3-methylphenol	140	10	200.0	0	67.6	46.3	108	7.30	32.7		
2-Chlorophenol	120	10	200.0	0	59.8	38	99.3	8.77	20		
1,4-Dichlorobenzene	54	10	100.0	0	53.8	30.8	80.6	13.6	20		
2,4-Dinitrotoluene	70	10	100.0	0	70.2	46.1	117	4.16	29.9		
N-Nitrosodi-n-propylamine	65	10	100.0	0	64.8	39.3	110	11.9	23.1		
4-Nitrophenol	75	10	200.0	0	37.7	29.8	67	5.34	40.5		
Pentachlorophenol	110	20	200.0	0	54.1	32.2	95.7	2.07	37.3		
Phenol	68	10	200.0	0	34.1	27	64.8	14.1	20		
Pyrene	68	10	100.0	0	67.9	44.7	97.3	5.13	26.5		
1,2,4-Trichlorobenzene	67	10	100.0	0	66.7	36.6	86.7	8.58	27.2		
Surr: 2,4,6-Tribromophenol	170		200.0		87.5	42.9	124	0	0		
Surr: 2-Fluorobiphenyl	72		100.0		71.5	40	108	0	0		
Surr: 2-Fluorophenol	110		200.0		53.9	23.6	94.8	0	0		
Surr: 4-Terphenyl-d14	72		100.0		72.5	41.9	103	0	0		
Surr: Nitrobenzene-d5	77		100.0		76.5	42.6	114	0	0		
Surr: Phenol-d5	90		200.0		45.1	20.3	74.7	0	0		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4629		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4629		RunNo: 6634					
Prep Date:	11/1/2012		Analysis Date: 11/1/2012		SeqNo: 191517		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4629		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4629		RunNo: 6634					
Prep Date:	11/1/2012		Analysis Date: 11/1/2012		SeqNo: 191518		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			

Sample ID	1210859-003CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4629		RunNo: 6634					
Prep Date:	11/1/2012		Analysis Date: 11/1/2012		SeqNo: 191520		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1609	0.02890	103	75	125			

Sample ID	1210859-003CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4629		RunNo: 6634					
Prep Date:	11/1/2012		Analysis Date: 11/1/2012		SeqNo: 191521		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.22	0.033	0.1651	0.02890	113	75	125	10.5	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4440	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4440	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186820	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								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	0.64	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4440	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4440	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186821	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0.6605	96.6	80	120			
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	25	0.10	25.00	0	98.6	80	120			
Beryllium	26	0.15	25.00	0	103	80	120			
Cadmium	25	0.10	25.00	0	98.8	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Cobalt	24	0.30	25.00	0	95.6	80	120			
Lead	24	0.25	25.00	0	96.6	80	120			
Manganese	24	0.10	25.00	0.05400	96.6	80	120			
Nickel	24	0.50	25.00	0	94.2	80	120			
Selenium	24	2.5	25.00	0	94.1	80	120			
Silver	6.0	0.25	5.000	0.6425	106	80	120			B
Vanadium	25	2.5	25.00	0	102	80	120			
Zinc	24	2.5	25.00	0	97.3	80	120			

Sample ID	1210771-001AMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4440	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186845	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.93	2.265	83.0	75	125			
Cadmium	20	0.10	24.93	0.03505	80.0	75	125			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1210771-001AMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4440	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186845	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	25	0.30	24.93	3.270	86.6	75	125			
Selenium	17	2.5	24.93	0	68.1	75	125			S

Sample ID	1210771-001AMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4440	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186849	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	23	2.5	24.96	2.265	81.7	75	125	1.34	20	
Cadmium	19	0.10	24.96	0.03505	77.2	75	125	3.39	20	
Chromium	24	0.30	24.96	3.270	84.2	75	125	2.39	20	
Selenium	15	2.5	24.96	0	61.4	75	125	10.1	20	S

Sample ID	MB-4440	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4440	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188992	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID	LCS-4440	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4440	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188993	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.7	0.25	5.000	0	113	80	120			

Sample ID	1210771-001AMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4440	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	189043	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.3	0.25	4.987	0	85.5	75	125			

Sample ID	1210771-001AMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4440	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	189044	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.0	0.25	4.992	0	80.9	75	125	5.39	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-4440		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 4440		RunNo: 6670					
Prep Date:	10/22/2012		Analysis Date: 11/2/2012		SeqNo: 192431		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	LCS-4440		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 4440		RunNo: 6670					
Prep Date:	10/22/2012		Analysis Date: 11/2/2012		SeqNo: 192432		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	1.0	25.00	0	109	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210860

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID b6	SampType: MBLK			TestCode: Modified EPA Method 8015B: Gasoline Range						
Client ID: PBW	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/20/2012			SeqNo: 184074		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.6		10.00		95.8	70	130			

Sample ID 2.5ug gro lcs	SampType: LCS			TestCode: Modified EPA Method 8015B: Gasoline Range						
Client ID: LCSW	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184077		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.43	0.050	0.5000	0	86.2	85	115			
Surr: BFB	10		10.00		99.9	70	130			

Sample ID 1210660-001ams	SampType: MS			TestCode: Modified EPA Method 8015B: Gasoline Range						
Client ID: BatchQC	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/20/2012			SeqNo: 184078		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID 1210660-001amsd	SampType: MSD			TestCode: Modified EPA Method 8015B: Gasoline Range						
Client ID: BatchQC	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/20/2012			SeqNo: 184079		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

Sample ID 5ml rb	SampType: MBLK			TestCode: Modified EPA Method 8015B: Gasoline Range						
Client ID: PBW	Batch ID: R6402			RunNo: 6402						
Prep Date:	Analysis Date: 10/21/2012			SeqNo: 184122		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.5		10.00		95.0	70	130			

Sample ID 2.5ug gro lcs	SampType: LCS			TestCode: Modified EPA Method 8015B: Gasoline Range						
Client ID: LCSW	Batch ID: R6402			RunNo: 6402						
Prep Date:	Analysis Date: 10/21/2012			SeqNo: 184125		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	85	115			
Surr: BFB	9.6		10.00		95.9	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
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: 1210860

Received by/date: AT 10/18/12

Logged By: Michelle Garcia 10/18/2012 8:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia 10/18/2012 9:43:44 AM

Michelle Garcia

Reviewed By: [Signature] 10/18/12

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

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

Special Handling (if applicable)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

