

AP - 111

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

Investigation Report (10)

August 2015

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-5 GW

Project: SWMU NO.1

Collection Date: 10/5/2012 3:20:00 PM

Lab ID: 1210372-013

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
2-Hexanone	ND	20		µg/L	2	10/9/2012 5:10:44 PM
Isopropylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	10/9/2012 5:10:44 PM
Methylene Chloride	ND	6.0		µg/L	2	10/9/2012 5:10:44 PM
n-Butylbenzene	ND	6.0		µg/L	2	10/9/2012 5:10:44 PM
n-Propylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
sec-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Styrene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
tert-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
trans-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	10/9/2012 5:10:44 PM
Vinyl chloride	ND	2.0		µg/L	2	10/9/2012 5:10:44 PM
Xylenes, Total	ND	3.0		µg/L	2	10/9/2012 5:10:44 PM
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	2	10/9/2012 5:10:44 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	2	10/9/2012 5:10:44 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	2	10/9/2012 5:10:44 PM
Surr: Toluene-d8	97.0	70-130		%REC	2	10/9/2012 5:10:44 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

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Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-8 GW

Project: SWMU NO.1

Collection Date: 10/5/2012 4:05:00 PM

Lab ID: 1210372-014

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 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	10/8/2012 6:39:15 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 6:39:15 PM
Surr: DNOP	122	79.5-166		%REC	1	10/8/2012 6:39:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.0	0.050		mg/L	1	10/10/2012 6:46:57 PM
Surr: BFB	165	69.8-119	S	%REC	1	10/10/2012 6:46:57 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	0.78	0.10		mg/L	1	10/11/2012 3:47:36 AM
Chloride	660	25		mg/L	50	10/11/2012 10:14:48 PM
Sulfate	52	2.5		mg/L	5	10/8/2012 8:53:56 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	4.7	0.020	*	mg/L	5	10/10/2012 6:57:30 PM
Beryllium	0.0065	0.0040	*	mg/L	1	10/10/2012 6:54:11 PM
Cadmium	ND	0.0040		mg/L	1	10/10/2012 6:54:11 PM
Chromium	0.058	0.012		mg/L	1	10/12/2012 8:21:18 AM
Cobalt	0.053	0.012		mg/L	1	10/10/2012 6:54:11 PM
Iron	39	2.0	*	mg/L	50	10/12/2012 8:24:41 AM
Manganese	7.9	0.020	*	mg/L	5	10/10/2012 6:57:30 PM
Nickel	0.11	0.020	*	mg/L	1	10/10/2012 6:54:11 PM
Silver	ND	0.010		mg/L	1	10/10/2012 6:54:11 PM
Vanadium	ND	0.10		mg/L	1	10/10/2012 6:54:11 PM
Zinc	0.11	0.020		mg/L	1	10/12/2012 8:21:18 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0050		mg/L	2.5	10/15/2012 5:10:56 PM
Arsenic	0.032	0.0050	*	mg/L	2.5	10/15/2012 5:10:56 PM
Lead	0.078	0.0050	*	mg/L	2.5	10/15/2012 5:10:56 PM
Selenium	0.0075	0.0050		mg/L	2.5	10/15/2012 5:10:56 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:52:50 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Acenaphthylene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Aniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Anthracene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Azobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benz(a)anthracene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/11/2012 11:37:31 PM

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EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(k)fluoranthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Benzoic acid	ND	20		µg/L	1	10/11/2012 11:37:31 PM
Benzyl alcohol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Carbazole	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Chloroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Chlorophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Chrysene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Dibenzofuran	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Diethyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Dimethyl phthalate	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Fluoranthene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Fluorene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Hexachloroethane	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Isophorone	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM

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EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Methylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
3+4-Methylphenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Naphthalene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
3-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Nitroaniline	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Nitrobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2-Nitrophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
4-Nitrophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Pentachlorophenol	ND	20		µg/L	1	10/11/2012 11:37:31 PM
Phenanthrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Phenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Pyrene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Pyridine	ND	10		µg/L	1	10/11/2012 11:37:31 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/11/2012 11:37:31 PM
Surr: 2,4,6-Tribromophenol	77.6	44.2-126		%REC	1	10/11/2012 11:37:31 PM
Surr: 2-Fluorobiphenyl	75.6	37-114		%REC	1	10/11/2012 11:37:31 PM
Surr: 2-Fluorophenol	62.3	23.4-98		%REC	1	10/11/2012 11:37:31 PM
Surr: 4-Terphenyl-d14	61.0	41.3-116		%REC	1	10/11/2012 11:37:31 PM
Surr: Nitrobenzene-d5	78.2	39.5-118		%REC	1	10/11/2012 11:37:31 PM
Surr: Phenol-d5	45.5	20.9-95.9		%REC	1	10/11/2012 11:37:31 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	2.3	1.0		µg/L	1	10/9/2012 5:38:50 PM
Toluene	2.3	1.0		µg/L	1	10/9/2012 5:38:50 PM
Ethylbenzene	2.8	1.0		µg/L	1	10/9/2012 5:38:50 PM
Methyl tert-butyl ether (MTBE)	310	10		µg/L	10	10/10/2012 3:10:30 PM
1,2,4-Trimethylbenzene	6.9	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,3,5-Trimethylbenzene	1.5	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Naphthalene	2.3	2.0		µg/L	1	10/9/2012 5:38:50 PM
1-Methylnaphthalene	9.8	4.0		µg/L	1	10/9/2012 5:38:50 PM
2-Methylnaphthalene	10	4.0		µg/L	1	10/9/2012 5:38:50 PM
Acetone	58	10		µg/L	1	10/9/2012 5:38:50 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM

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Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Bromoform	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Isopropylbenzene	1.3	1.0		µg/L	1	10/9/2012 5:38:50 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 5:38:50 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 5:38:50 PM
n-Propylbenzene	1.7	1.0		µg/L	1	10/9/2012 5:38:50 PM
sec-Butylbenzene	1.4	1.0		µg/L	1	10/9/2012 5:38:50 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM

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1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 5:38:50 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 5:38:50 PM
Xylenes, Total	5.9	1.5		µg/L	1	10/9/2012 5:38:50 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/9/2012 5:38:50 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	1	10/9/2012 5:38:50 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/9/2012 5:38:50 PM
Surr: Toluene-d8	93.2	70-130		%REC	1	10/9/2012 5:38:50 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (16-18')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:40:00 PM

Lab ID: 1210372-015

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 11:15:13 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 11:15:13 AM
Surr: DNOP	98.6	77.6-140		%REC	1	10/9/2012 11:15:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 1:50:59 AM
Surr: BFB	99.5	84-116		%REC	1	10/9/2012 1:50:59 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:34:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 4:48:45 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:48:45 PM
Barium	330	5.0		mg/Kg	50	10/11/2012 4:51:11 PM
Beryllium	1.1	0.75		mg/Kg	5	10/11/2012 4:48:45 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:48:45 PM
Chromium	15	1.5		mg/Kg	5	10/11/2012 4:48:45 PM
Cobalt	6.4	1.5		mg/Kg	5	10/11/2012 4:48:45 PM
Iron	22000	500		mg/Kg	500	10/11/2012 4:53:35 PM
Lead	1.7	1.2		mg/Kg	5	10/11/2012 4:48:45 PM
Manganese	510	5.0		mg/Kg	50	10/11/2012 4:51:11 PM
Nickel	13	2.5		mg/Kg	5	10/11/2012 4:48:45 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:48:45 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:48:45 PM
Vanadium	28	12		mg/Kg	5	10/11/2012 4:48:45 PM
Zinc	25	12		mg/Kg	5	10/11/2012 4:48:45 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (16-18')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:40:00 PM

Lab ID: 1210372-015

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 5:59:23 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 5:59:23 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (16-18')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:40:00 PM

Lab ID: 1210372-015

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 5:59:23 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 5:59:23 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 5:59:23 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 5:59:23 AM
Surr: 2,4,6-Tribromophenol	73.2	21.3-145		%REC	1	10/10/2012 5:59:23 AM
Surr: 2-Fluorobiphenyl	61.1	20-131		%REC	1	10/10/2012 5:59:23 AM
Surr: 2-Fluorophenol	59.3	11.9-130		%REC	1	10/10/2012 5:59:23 AM
Surr: 4-Terphenyl-d14	63.3	25.1-149		%REC	1	10/10/2012 5:59:23 AM
Surr: Nitrobenzene-d5	57.8	25.6-137		%REC	1	10/10/2012 5:59:23 AM
Surr: Phenol-d5	65.2	20.3-132		%REC	1	10/10/2012 5:59:23 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00136	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Toluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Ethylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Xylenes, Total	ND	0.00196		mg/Kg	1	10/9/2012 4:02:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2,4-Trimethylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,3,5-Trimethylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dichloroethane (EDC)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dibromoethane (EDB)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Naphthalene	ND	0.00196		mg/Kg	1	10/9/2012 4:02:30 PM
1-Methylnaphthalene	ND	0.00393		mg/Kg	1	10/9/2012 4:02:30 PM
2-Methylnaphthalene	ND	0.00393		mg/Kg	1	10/9/2012 4:02:30 PM
Acetone	0.00987	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromodichloromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromoform	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Bromomethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2-Butanone	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
Carbon tetrachloride	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Chlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Chloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (16-18')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:40:00 PM

Lab ID: 1210372-015

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Chloromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2-Chlorotoluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Carbon disulfide	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
4-Chlorotoluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
cis-1,2-DCE	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
cis-1,3-Dichloropropene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Dibromochloromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Dibromomethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,3-Dichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,4-Dichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Dichlorodifluoromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1-Dichloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1-Dichloroethene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2-Dichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,3-Dichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2,2-Dichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1-Dichloropropene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Hexachlorobutadiene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Isopropylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
4-Isopropyltoluene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Methylene chloride	ND	0.00295		mg/Kg	1	10/9/2012 4:02:30 PM
n-Butylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
2-Hexanone	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
n-Propylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
sec-Butylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Styrene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
4-Methyl-2-pentanone	ND	0.00982		mg/Kg	1	10/9/2012 4:02:30 PM
tert-Butylbenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Tetrachloroethene (PCE)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
trans-1,2-DCE	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
trans-1,3-Dichloropropene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2,3-Trichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,2,4-Trichlorobenzene	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,1-Trichloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
1,1,2-Trichloroethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Trichloroethene (TCE)	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Trichlorofluoromethane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (16-18')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:40:00 PM

Lab ID: 1210372-015

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Vinyl chloride	ND	0.000982		mg/Kg	1	10/9/2012 4:02:30 PM
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%REC	1	10/9/2012 4:02:30 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	1	10/9/2012 4:02:30 PM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	10/9/2012 4:02:30 PM
Surr: Toluene-d8	99.8	70-130		%REC	1	10/9/2012 4:02:30 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (10-11')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:45:00 AM

Lab ID: 1210372-016

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 11:36:49 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 11:36:49 AM
Surr: DNOP	94.1	77.6-140		%REC	1	10/9/2012 11:36:49 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 2:19:49 AM
Surr: BFB	101	84-116		%REC	1	10/9/2012 2:19:49 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:39:21 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 4:56:13 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 4:56:13 PM
Barium	380	5.0		mg/Kg	50	10/11/2012 4:58:37 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 4:56:13 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 4:56:13 PM
Chromium	7.2	1.5		mg/Kg	5	10/11/2012 4:56:13 PM
Cobalt	3.8	1.5		mg/Kg	5	10/11/2012 4:56:13 PM
Iron	11000	500		mg/Kg	500	10/11/2012 5:01:02 PM
Lead	3.6	1.2		mg/Kg	5	10/11/2012 4:56:13 PM
Manganese	750	5.0		mg/Kg	50	10/11/2012 4:58:37 PM
Nickel	5.5	2.5		mg/Kg	5	10/11/2012 4:56:13 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 4:56:13 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 4:56:13 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 4:56:13 PM
Zinc	13	12		mg/Kg	5	10/11/2012 4:56:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (10-11')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:45:00 AM

Lab ID: 1210372-016

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 6:28:22 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 6:28:22 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 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
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (10-11')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:45:00 AM

Lab ID: 1210372-016

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 6:28:22 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:28:22 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 6:28:22 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:28:22 AM
Surr: 2,4,6-Tribromophenol	64.9	21.3-145		%REC	1	10/10/2012 6:28:22 AM
Surr: 2-Fluorobiphenyl	60.0	20-131		%REC	1	10/10/2012 6:28:22 AM
Surr: 2-Fluorophenol	60.5	11.9-130		%REC	1	10/10/2012 6:28:22 AM
Surr: 4-Terphenyl-d14	55.8	25.1-149		%REC	1	10/10/2012 6:28:22 AM
Surr: Nitrobenzene-d5	61.6	25.6-137		%REC	1	10/10/2012 6:28:22 AM
Surr: Phenol-d5	61.6	20.3-132		%REC	1	10/10/2012 6:28:22 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Toluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Ethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Xylenes, Total	ND	0.00213		mg/Kg	1	10/9/2012 4:33:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2,4-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,3,5-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dichloroethane (EDC)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dibromoethane (EDB)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Naphthalene	ND	0.00213		mg/Kg	1	10/9/2012 4:33:16 PM
1-Methylnaphthalene	ND	0.00426		mg/Kg	1	10/9/2012 4:33:16 PM
2-Methylnaphthalene	ND	0.00426		mg/Kg	1	10/9/2012 4:33:16 PM
Acetone	0.0539	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromodichloromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromoform	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Bromomethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2-Butanone	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
Carbon tetrachloride	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Chlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Chloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (10-11')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:45:00 AM

Lab ID: 1210372-016

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Chloromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Carbon disulfide	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
4-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
cis-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
cis-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dibromo-3-chloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Dibromochloromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Dibromomethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,3-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,4-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Dichlorodifluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1-Dichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1-Dichloroethene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,3-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Hexachlorobutadiene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Isopropylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
4-Isopropyltoluene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Methylene chloride	ND	0.00320		mg/Kg	1	10/9/2012 4:33:16 PM
n-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
2-Hexanone	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
n-Propylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
sec-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Styrene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
4-Methyl-2-pentanone	ND	0.0107		mg/Kg	1	10/9/2012 4:33:16 PM
tert-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,1,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,2,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Tetrachloroethene (PCE)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
trans-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
trans-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2,3-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,2,4-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,1-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
1,1,2-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Trichloroethene (TCE)	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Trichlorofluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (10-11')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:45:00 AM

Lab ID: 1210372-016

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Vinyl chloride	ND	0.00107		mg/Kg	1	10/9/2012 4:33:16 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	1	10/9/2012 4:33:16 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/9/2012 4:33:16 PM
Surr: Dibromofluoromethane	93.6	70-130		%REC	1	10/9/2012 4:33:16 PM
Surr: Toluene-d8	89.3	70-130		%REC	1	10/9/2012 4:33:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (11-12')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:55:00 AM

Lab ID: 1210372-017

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 10:44:56 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 10:44:56 AM
Surr: DNOP	101	77.6-140		%REC	1	10/9/2012 10:44:56 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 2:48:36 AM
Surr: BFB	103	84-116		%REC	1	10/9/2012 2:48:36 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/11/2012 3:41:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 5:03:56 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 5:03:56 PM
Barium	700	5.0		mg/Kg	50	10/11/2012 5:12:21 PM
Beryllium	0.96	0.75		mg/Kg	5	10/11/2012 5:03:56 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:03:56 PM
Chromium	14	1.5		mg/Kg	5	10/11/2012 5:03:56 PM
Cobalt	6.2	1.5		mg/Kg	5	10/11/2012 5:03:56 PM
Iron	18000	500		mg/Kg	500	10/11/2012 5:16:24 PM
Lead	ND	1.2		mg/Kg	5	10/11/2012 5:03:56 PM
Manganese	480	5.0		mg/Kg	50	10/11/2012 5:12:21 PM
Nickel	12	2.5		mg/Kg	5	10/11/2012 5:03:56 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 5:03:56 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:03:56 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 5:03:56 PM
Zinc	25	12		mg/Kg	5	10/11/2012 5:03:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (11-12')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:55:00 AM

Lab ID: 1210372-017

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 6:57:20 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 6:57:20 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (11-12')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:55:00 AM

Lab ID: 1210372-017

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 6:57:20 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 6:57:20 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 6:57:20 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 6:57:20 AM
Surr: 2,4,6-Tribromophenol	94.5	21.3-145		%REC	1	10/10/2012 6:57:20 AM
Surr: 2-Fluorobiphenyl	86.5	20-131		%REC	1	10/10/2012 6:57:20 AM
Surr: 2-Fluorophenol	82.6	11.9-130		%REC	1	10/10/2012 6:57:20 AM
Surr: 4-Terphenyl-d14	77.7	25.1-149		%REC	1	10/10/2012 6:57:20 AM
Surr: Nitrobenzene-d5	92.7	25.6-137		%REC	1	10/10/2012 6:57:20 AM
Surr: Phenol-d5	86.3	20.3-132		%REC	1	10/10/2012 6:57:20 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Toluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Ethylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Xylenes, Total	ND	0.00273		mg/Kg	1	10/9/2012 5:04:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2,4-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,3,5-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dichloroethane (EDC)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dibromoethane (EDB)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Naphthalene	ND	0.00273		mg/Kg	1	10/9/2012 5:04:01 PM
1-Methylnaphthalene	ND	0.00545		mg/Kg	1	10/9/2012 5:04:01 PM
2-Methylnaphthalene	ND	0.00545		mg/Kg	1	10/9/2012 5:04:01 PM
Acetone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromodichloromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromoform	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Bromomethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2-Butanone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
Carbon tetrachloride	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Chlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Chloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (11-12')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:55:00 AM

Lab ID: 1210372-017

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Chloromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2-Chlorotoluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Carbon disulfide	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
4-Chlorotoluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
cis-1,2-DCE	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
cis-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dibromo-3-chloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Dibromochloromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Dibromomethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,3-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,4-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Dichlorodifluoromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1-Dichloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1-Dichloroethene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,3-Dichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1-Dichloropropene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Hexachlorobutadiene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Isopropylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
4-Isopropyltoluene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Methylene chloride	ND	0.00409		mg/Kg	1	10/9/2012 5:04:01 PM
n-Butylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
2-Hexanone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
n-Propylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
sec-Butylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Styrene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
4-Methyl-2-pentanone	ND	0.0136		mg/Kg	1	10/9/2012 5:04:01 PM
tert-Butylbenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,1,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,2,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Tetrachloroethene (PCE)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
trans-1,2-DCE	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
trans-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2,3-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,2,4-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,1-Trichloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
1,1,2-Trichloroethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Trichloroethene (TCE)	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Trichlorofluoromethane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (11-12')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:55:00 AM

Lab ID: 1210372-017

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Vinyl chloride	ND	0.00136		mg/Kg	1	10/9/2012 5:04:01 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%REC	1	10/9/2012 5:04:01 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/9/2012 5:04:01 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/9/2012 5:04:01 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/9/2012 5:04:01 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (12-14')

Project: SWMU NO.1

Collection Date: 10/4/2012 1:55:00 PM

Lab ID: 1210372-018

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 11:09:39 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 11:09:39 AM
Surr: DNOP	101	77.6-140		%REC	1	10/9/2012 11:09:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 3:17:22 AM
Surr: BFB	107	84-116		%REC	1	10/9/2012 3:17:22 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:14:37 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 5:21:56 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 5:21:56 PM
Barium	87	0.50		mg/Kg	5	10/11/2012 5:21:56 PM
Beryllium	1.1	0.75		mg/Kg	5	10/11/2012 5:21:56 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:21:56 PM
Chromium	12	1.5		mg/Kg	5	10/11/2012 5:21:56 PM
Cobalt	5.4	1.5		mg/Kg	5	10/11/2012 5:21:56 PM
Iron	16000	500		mg/Kg	500	10/11/2012 5:26:48 PM
Lead	4.0	1.2		mg/Kg	5	10/11/2012 5:21:56 PM
Manganese	360	5.0		mg/Kg	50	10/11/2012 5:24:24 PM
Nickel	9.3	2.5		mg/Kg	5	10/11/2012 5:21:56 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 5:21:56 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:21:56 PM
Vanadium	20	12		mg/Kg	5	10/11/2012 5:21:56 PM
Zinc	18	12		mg/Kg	5	10/11/2012 5:21:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (12-14')

Project: SWMU NO.1

Collection Date: 10/4/2012 1:55:00 PM

Lab ID: 1210372-018

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 7:26:18 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 7:26:18 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (12-14')

Project: SWMU NO.1

Collection Date: 10/4/2012 1:55:00 PM

Lab ID: 1210372-018

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 7:26:18 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:26:18 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 7:26:18 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:26:18 AM
Surr: 2,4,6-Tribromophenol	89.5	21.3-145		%REC	1	10/10/2012 7:26:18 AM
Surr: 2-Fluorobiphenyl	85.6	20-131		%REC	1	10/10/2012 7:26:18 AM
Surr: 2-Fluorophenol	85.6	11.9-130		%REC	1	10/10/2012 7:26:18 AM
Surr: 4-Terphenyl-d14	76.0	25.1-149		%REC	1	10/10/2012 7:26:18 AM
Surr: Nitrobenzene-d5	91.1	25.6-137		%REC	1	10/10/2012 7:26:18 AM
Surr: Phenol-d5	90.8	20.3-132		%REC	1	10/10/2012 7:26:18 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Toluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Ethylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Xylenes, Total	ND	0.00237		mg/Kg	1	10/9/2012 5:34:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2,4-Trimethylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,3,5-Trimethylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dichloroethane (EDC)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dibromoethane (EDB)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Naphthalene	ND	0.00237		mg/Kg	1	10/9/2012 5:34:52 PM
1-Methylnaphthalene	ND	0.00475		mg/Kg	1	10/9/2012 5:34:52 PM
2-Methylnaphthalene	ND	0.00475		mg/Kg	1	10/9/2012 5:34:52 PM
Acetone	0.0138	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromodichloromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromoform	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Bromomethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2-Butanone	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
Carbon tetrachloride	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Chlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Chloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (12-14')

Project: SWMU NO.1

Collection Date: 10/4/2012 1:55:00 PM

Lab ID: 1210372-018

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Chloromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2-Chlorotoluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Carbon disulfide	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
4-Chlorotoluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
cis-1,2-DCE	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
cis-1,3-Dichloropropene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dibromo-3-chloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Dibromochloromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Dibromomethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,3-Dichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,4-Dichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Dichlorodifluoromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1-Dichloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1-Dichloroethene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2-Dichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,3-Dichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2,2-Dichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1-Dichloropropene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Hexachlorobutadiene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Isopropylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
4-Isopropyltoluene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Methylene chloride	ND	0.00356		mg/Kg	1	10/9/2012 5:34:52 PM
n-Butylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
2-Hexanone	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
n-Propylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
sec-Butylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Styrene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
4-Methyl-2-pentanone	ND	0.0119		mg/Kg	1	10/9/2012 5:34:52 PM
tert-Butylbenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,1,2-Tetrachloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,2,2-Tetrachloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Tetrachloroethene (PCE)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
trans-1,2-DCE	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
trans-1,3-Dichloropropene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2,3-Trichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,2,4-Trichlorobenzene	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,1-Trichloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
1,1,2-Trichloroethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Trichloroethene (TCE)	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Trichlorofluoromethane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (12-14')

Project: SWMU NO.1

Collection Date: 10/4/2012 1:55:00 PM

Lab ID: 1210372-018

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Vinyl chloride	ND	0.00119		mg/Kg	1	10/9/2012 5:34:52 PM
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%REC	1	10/9/2012 5:34:52 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/9/2012 5:34:52 PM
Surr: Dibromofluoromethane	92.3	70-130		%REC	1	10/9/2012 5:34:52 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	10/9/2012 5:34:52 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (14-16')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:15:00 PM

Lab ID: 1210372-019

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/9/2012 11:34:18 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 11:34:18 AM
Surr: DNOP	105	77.6-140		%REC	1	10/9/2012 11:34:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 3:46:11 AM
Surr: BFB	107	84-116		%REC	1	10/9/2012 3:46:11 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:16:25 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 5:29:25 PM
Arsenic	ND	12		mg/Kg	5	10/11/2012 5:29:25 PM
Barium	290	5.0		mg/Kg	50	10/11/2012 5:31:52 PM
Beryllium	0.95	0.75		mg/Kg	5	10/11/2012 5:29:25 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:29:25 PM
Chromium	11	1.5		mg/Kg	5	10/11/2012 5:29:25 PM
Cobalt	6.0	1.5		mg/Kg	5	10/11/2012 5:29:25 PM
Iron	15000	500		mg/Kg	500	10/11/2012 5:34:18 PM
Lead	3.3	1.2		mg/Kg	5	10/11/2012 5:29:25 PM
Manganese	790	5.0		mg/Kg	50	10/11/2012 5:31:52 PM
Nickel	9.7	2.5		mg/Kg	5	10/11/2012 5:29:25 PM
Selenium	ND	12		mg/Kg	5	10/11/2012 5:29:25 PM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:29:25 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 5:29:25 PM
Zinc	18	12		mg/Kg	5	10/11/2012 5:29:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Benzoic acid	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (14-16')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:15:00 PM

Lab ID: 1210372-019

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 7:55:14 AM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Isophorone	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2-Methylphenol	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (14-16')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:15:00 PM

Lab ID: 1210372-019

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
Nitrobenzene	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 7:55:14 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 7:55:14 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Pyridine	ND	0.51		mg/Kg	1	10/10/2012 7:55:14 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 7:55:14 AM
Surr: 2,4,6-Tribromophenol	55.6	21.3-145		%REC	1	10/10/2012 7:55:14 AM
Surr: 2-Fluorobiphenyl	48.8	20-131		%REC	1	10/10/2012 7:55:14 AM
Surr: 2-Fluorophenol	45.8	11.9-130		%REC	1	10/10/2012 7:55:14 AM
Surr: 4-Terphenyl-d14	53.3	25.1-149		%REC	1	10/10/2012 7:55:14 AM
Surr: Nitrobenzene-d5	48.9	25.6-137		%REC	1	10/10/2012 7:55:14 AM
Surr: Phenol-d5	51.9	20.3-132		%REC	1	10/10/2012 7:55:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Toluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Ethylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Xylenes, Total	ND	0.00291		mg/Kg	1	10/9/2012 6:05:43 PM
Methyl tert-butyl ether (MTBE)	0.00190	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2,4-Trimethylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,3,5-Trimethylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dichloroethane (EDC)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dibromoethane (EDB)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Naphthalene	ND	0.00291		mg/Kg	1	10/9/2012 6:05:43 PM
1-Methylnaphthalene	ND	0.00581		mg/Kg	1	10/9/2012 6:05:43 PM
2-Methylnaphthalene	ND	0.00581		mg/Kg	1	10/9/2012 6:05:43 PM
Acetone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromodichloromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromoform	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Bromomethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2-Butanone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
Carbon tetrachloride	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Chlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Chloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (14-16')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:15:00 PM

Lab ID: 1210372-019

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Chloromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2-Chlorotoluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Carbon disulfide	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
4-Chlorotoluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
cis-1,2-DCE	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
cis-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dibromo-3-chloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Dibromochloromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Dibromomethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,3-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,4-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Dichlorodifluoromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1-Dichloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1-Dichloroethene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,3-Dichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1-Dichloropropene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Hexachlorobutadiene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Isopropylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
4-Isopropyltoluene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Methylene chloride	ND	0.00436		mg/Kg	1	10/9/2012 6:05:43 PM
n-Butylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
2-Hexanone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
n-Propylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
sec-Butylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Styrene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
4-Methyl-2-pentanone	ND	0.0145		mg/Kg	1	10/9/2012 6:05:43 PM
tert-Butylbenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,1,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,2,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Tetrachloroethene (PCE)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
trans-1,2-DCE	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
trans-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2,3-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,2,4-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,1-Trichloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
1,1,2-Trichloroethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Trichloroethene (TCE)	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Trichlorofluoromethane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 (14-16')

Project: SWMU NO.1

Collection Date: 10/4/2012 2:15:00 PM

Lab ID: 1210372-019

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Vinyl chloride	ND	0.00145		mg/Kg	1	10/9/2012 6:05:43 PM
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%REC	1	10/9/2012 6:05:43 PM
Surr: 4-Bromofluorobenzene	88.4	70-130		%REC	1	10/9/2012 6:05:43 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/9/2012 6:05:43 PM
Surr: Toluene-d8	97.0	70-130		%REC	1	10/9/2012 6:05:43 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4')

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-020

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 9:05:06 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 9:05:06 AM
Surr: DNOP	104	77.6-140		%REC	1	10/9/2012 9:05:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 4:14:57 AM
Surr: BFB	102	84-116		%REC	1	10/9/2012 4:14:57 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:18:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
Arsenic	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
Barium	660	5.0		mg/Kg	50	10/11/2012 5:39:21 PM
Beryllium	ND	1.5		mg/Kg	10	10/15/2012 10:16:58 AM
Cadmium	ND	1.0		mg/Kg	10	10/15/2012 10:16:58 AM
Chromium	6.1	3.0		mg/Kg	10	10/15/2012 10:16:58 AM
Cobalt	3.5	3.0		mg/Kg	10	10/15/2012 10:16:58 AM
Iron	9600	500		mg/Kg	500	10/11/2012 5:49:22 PM
Lead	5.4	2.5		mg/Kg	10	10/15/2012 10:16:58 AM
Manganese	1000	5.0		mg/Kg	50	10/11/2012 5:39:21 PM
Nickel	ND	5.0		mg/Kg	10	10/15/2012 10:16:58 AM
Selenium	ND	25		mg/Kg	10	10/15/2012 10:35:25 AM
Silver	ND	2.5		mg/Kg	10	10/15/2012 10:16:58 AM
Vanadium	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
Zinc	ND	25		mg/Kg	10	10/15/2012 10:16:58 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM

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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4")

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-020

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 8:24:14 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 8:24:14 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4")

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-020

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 8:24:14 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:24:14 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 8:24:14 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:24:14 AM
Surr: 2,4,6-Tribromophenol	82.7	21.3-145		%REC	1	10/10/2012 8:24:14 AM
Surr: 2-Fluorobiphenyl	78.3	20-131		%REC	1	10/10/2012 8:24:14 AM
Surr: 2-Fluorophenol	86.8	11.9-130		%REC	1	10/10/2012 8:24:14 AM
Surr: 4-Terphenyl-d14	72.3	25.1-149		%REC	1	10/10/2012 8:24:14 AM
Surr: Nitrobenzene-d5	88.2	25.6-137		%REC	1	10/10/2012 8:24:14 AM
Surr: Phenol-d5	89.0	20.3-132		%REC	1	10/10/2012 8:24:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Toluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Ethylbenzene	0.00563	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Xylenes, Total	0.0431	0.00213		mg/Kg	1	10/9/2012 6:36:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2,4-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,3,5-Trimethylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dichloroethane (EDC)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dibromoethane (EDB)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Naphthalene	ND	0.00213		mg/Kg	1	10/9/2012 6:36:32 PM
1-Methylnaphthalene	ND	0.00427		mg/Kg	1	10/9/2012 6:36:32 PM
2-Methylnaphthalene	ND	0.00427		mg/Kg	1	10/9/2012 6:36:32 PM
Acetone	0.477	0.0107	E	mg/Kg	1	10/9/2012 6:36:32 PM
Bromobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Bromodichloromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Bromoform	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Bromomethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2-Butanone	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
Carbon tetrachloride	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Chlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Chloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4')

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-020

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Chloromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Carbon disulfide	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
4-Chlorotoluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
cis-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
cis-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dibromo-3-chloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Dibromochloromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Dibromomethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,3-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,4-Dichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Dichlorodifluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1-Dichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1-Dichloroethene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,3-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2,2-Dichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Hexachlorobutadiene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Isopropylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
4-Isopropyltoluene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Methylene chloride	ND	0.00320		mg/Kg	1	10/9/2012 6:36:32 PM
n-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
2-Hexanone	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
n-Propylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
sec-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Styrene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
4-Methyl-2-pentanone	ND	0.0107		mg/Kg	1	10/9/2012 6:36:32 PM
tert-Butylbenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,1,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,2,2-Tetrachloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Tetrachloroethene (PCE)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
trans-1,2-DCE	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
trans-1,3-Dichloropropene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2,3-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,2,4-Trichlorobenzene	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,1-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
1,1,2-Trichloroethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Trichloroethene (TCE)	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Trichlorofluoromethane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4')

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-020

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Vinyl chloride	ND	0.00107		mg/Kg	1	10/9/2012 6:36:32 PM
Surr: 1,2-Dichloroethane-d4	88.8	70-130		%REC	1	10/9/2012 6:36:32 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/9/2012 6:36:32 PM
Surr: Dibromofluoromethane	97.7	70-130		%REC	1	10/9/2012 6:36:32 PM
Surr: Toluene-d8	106	70-130		%REC	1	10/9/2012 6:36:32 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4") DUP

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-021

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 9:30:03 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/9/2012 9:30:03 AM
Surr: DNOP	104	77.6-140		%REC	1	10/9/2012 9:30:03 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2012 4:43:44 AM
Surr: BFB	102	84-116		%REC	1	10/9/2012 4:43:44 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:20:01 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 5:52:15 PM
Arsenic	ND	12		mg/Kg	5	10/15/2012 10:19:16 AM
Barium	930	5.0		mg/Kg	50	10/11/2012 5:57:34 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 5:52:15 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 5:52:15 PM
Chromium	7.0	1.5		mg/Kg	5	10/15/2012 10:19:16 AM
Cobalt	3.9	1.5		mg/Kg	5	10/11/2012 5:52:15 PM
Iron	10000	500		mg/Kg	500	10/11/2012 6:00:01 PM
Lead	5.0	1.2		mg/Kg	5	10/11/2012 5:52:15 PM
Manganese	830	5.0		mg/Kg	50	10/11/2012 5:57:34 PM
Nickel	5.2	2.5		mg/Kg	5	10/11/2012 5:52:15 PM
Selenium	ND	12		mg/Kg	5	10/15/2012 10:37:40 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 5:52:15 PM
Vanadium	24	12		mg/Kg	5	10/11/2012 5:52:15 PM
Zinc	13	12		mg/Kg	5	10/15/2012 10:19:16 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM

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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4") DUP

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-021

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 8:53:16 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 8:53:16 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4") DUP

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-021

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 8:53:16 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 8:53:16 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 8:53:16 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 8:53:16 AM
Surr: 2,4,6-Tribromophenol	75.2	21.3-145		%REC	1	10/10/2012 8:53:16 AM
Surr: 2-Fluorobiphenyl	81.9	20-131		%REC	1	10/10/2012 8:53:16 AM
Surr: 2-Fluorophenol	64.5	11.9-130		%REC	1	10/10/2012 8:53:16 AM
Surr: 4-Terphenyl-d14	74.1	25.1-149		%REC	1	10/10/2012 8:53:16 AM
Surr: Nitrobenzene-d5	74.2	25.6-137		%REC	1	10/10/2012 8:53:16 AM
Surr: Phenol-d5	74.8	20.3-132		%REC	1	10/10/2012 8:53:16 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Toluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Ethylbenzene	0.00112	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Xylenes, Total	0.00863	0.00170		mg/Kg	1	10/9/2012 7:07:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2,4-Trimethylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,3,5-Trimethylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dichloroethane (EDC)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dibromoethane (EDB)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Naphthalene	ND	0.00170		mg/Kg	1	10/9/2012 7:07:19 PM
1-Methylnaphthalene	ND	0.00341		mg/Kg	1	10/9/2012 7:07:19 PM
2-Methylnaphthalene	ND	0.00341		mg/Kg	1	10/9/2012 7:07:19 PM
Acetone	0.460	0.00852	E	mg/Kg	1	10/9/2012 7:07:19 PM
Bromobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Bromodichloromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Bromoform	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Bromomethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2-Butanone	ND	0.00852		mg/Kg	1	10/9/2012 7:07:19 PM
Carbon tetrachloride	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Chlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Chloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4") DUP

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-021

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Chloromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2-Chlorotoluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Carbon disulfide	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
4-Chlorotoluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
cis-1,2-DCE	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
cis-1,3-Dichloropropene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dibromo-3-chloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Dibromochloromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Dibromomethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,3-Dichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,4-Dichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Dichlorodifluoromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1-Dichloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1-Dichloroethene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2-Dichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,3-Dichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2,2-Dichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1-Dichloropropene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Hexachlorobutadiene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Isopropylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
4-Isopropyltoluene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Methylene chloride	ND	0.00256		mg/Kg	1	10/9/2012 7:07:19 PM
n-Butylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
2-Hexanone	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
n-Propylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
sec-Butylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Styrene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
4-Methyl-2-pentanone	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
tert-Butylbenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,1,2-Tetrachloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,2,2-Tetrachloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Tetrachloroethene (PCE)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
trans-1,2-DCE	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
trans-1,3-Dichloropropene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2,3-Trichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,2,4-Trichlorobenzene	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,1-Trichloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
1,1,2-Trichloroethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Trichloroethene (TCE)	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Trichlorofluoromethane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (2-4') DUP

Project: SWMU NO.1

Collection Date: 10/4/2012 10:55:00 AM

Lab ID: 1210372-021

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Vinyl chloride	ND	0.000852		mg/Kg	1	10/9/2012 7:07:19 PM
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	10/9/2012 7:07:19 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	1	10/9/2012 7:07:19 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	10/9/2012 7:07:19 PM
Surr: Toluene-d8	97.0	70-130		%REC	1	10/9/2012 7:07:19 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (4-6")

Project: SWMU NO.1

Collection Date: 10/4/2012 11:15:00 AM

Lab ID: 1210372-022

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/9/2012 9:55:06 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/9/2012 9:55:06 AM
Surr: DNOP	102	77.6-140		%REC	1	10/9/2012 9:55:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2012 12:51:22 AM
Surr: BFB	104	84-116		%REC	1	10/11/2012 12:51:22 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:21:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 6:02:53 PM
Arsenic	ND	12		mg/Kg	5	10/15/2012 10:21:33 AM
Barium	870	5.0		mg/Kg	50	10/11/2012 6:05:17 PM
Beryllium	ND	0.75		mg/Kg	5	10/11/2012 6:02:53 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 6:02:53 PM
Chromium	7.0	1.5		mg/Kg	5	10/15/2012 10:21:33 AM
Cobalt	5.7	1.5		mg/Kg	5	10/11/2012 6:02:53 PM
Iron	9500	500		mg/Kg	500	10/11/2012 6:07:44 PM
Lead	5.6	1.2		mg/Kg	5	10/11/2012 6:02:53 PM
Manganese	1100	5.0		mg/Kg	50	10/11/2012 6:05:17 PM
Nickel	5.2	2.5		mg/Kg	5	10/11/2012 6:02:53 PM
Selenium	ND	12		mg/Kg	5	10/15/2012 10:39:58 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 6:02:53 PM
Vanadium	16	12		mg/Kg	5	10/11/2012 6:02:53 PM
Zinc	15	12		mg/Kg	5	10/15/2012 10:21:33 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (4-6")

Project: SWMU NO.1

Collection Date: 10/4/2012 11:15:00 AM

Lab ID: 1210372-022

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 9:22:16 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 9:22:16 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (4-6")

Project: SWMU NO.1

Collection Date: 10/4/2012 11:15:00 AM

Lab ID: 1210372-022

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 9:22:16 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:22:16 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 9:22:16 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:22:16 AM
Surr: 2,4,6-Tribromophenol	87.0	21.3-145		%REC	1	10/10/2012 9:22:16 AM
Surr: 2-Fluorobiphenyl	88.5	20-131		%REC	1	10/10/2012 9:22:16 AM
Surr: 2-Fluorophenol	79.6	11.9-130		%REC	1	10/10/2012 9:22:16 AM
Surr: 4-Terphenyl-d14	74.9	25.1-149		%REC	1	10/10/2012 9:22:16 AM
Surr: Nitrobenzene-d5	91.0	25.6-137		%REC	1	10/10/2012 9:22:16 AM
Surr: Phenol-d5	91.3	20.3-132		%REC	1	10/10/2012 9:22:16 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Toluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Ethylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Xylenes, Total	ND	0.00206		mg/Kg	1	10/9/2012 7:38:03 PM
Methyl tert-butyl ether (MTBE)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2,4-Trimethylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,3,5-Trimethylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dichloroethane (EDC)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dibromoethane (EDB)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Naphthalene	ND	0.00206		mg/Kg	1	10/9/2012 7:38:03 PM
1-Methylnaphthalene	ND	0.00412		mg/Kg	1	10/9/2012 7:38:03 PM
2-Methylnaphthalene	ND	0.00412		mg/Kg	1	10/9/2012 7:38:03 PM
Acetone	0.0625	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromodichloromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromoform	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Bromomethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2-Butanone	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
Carbon tetrachloride	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Chlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Chloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (4-6")

Project: SWMU NO.1

Collection Date: 10/4/2012 11:15:00 AM

Lab ID: 1210372-022

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Chloromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2-Chlorotoluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Carbon disulfide	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
4-Chlorotoluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
cis-1,2-DCE	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
cis-1,3-Dichloropropene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dibromo-3-chloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Dibromochloromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Dibromomethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,3-Dichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,4-Dichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Dichlorodifluoromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1-Dichloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1-Dichloroethene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2-Dichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,3-Dichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2,2-Dichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1-Dichloropropene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Hexachlorobutadiene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Isopropylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
4-Isopropyltoluene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Methylene chloride	ND	0.00309		mg/Kg	1	10/9/2012 7:38:03 PM
n-Butylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
2-Hexanone	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
n-Propylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
sec-Butylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Styrene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
4-Methyl-2-pentanone	ND	0.0103		mg/Kg	1	10/9/2012 7:38:03 PM
tert-Butylbenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,1,2-Tetrachloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,2,2-Tetrachloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Tetrachloroethene (PCE)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
trans-1,2-DCE	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
trans-1,3-Dichloropropene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2,3-Trichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,2,4-Trichlorobenzene	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,1-Trichloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
1,1,2-Trichloroethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Trichloroethene (TCE)	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Trichlorofluoromethane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (4-6')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:15:00 AM

Lab ID: 1210372-022

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Vinyl chloride	ND	0.00103		mg/Kg	1	10/9/2012 7:38:03 PM
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%REC	1	10/9/2012 7:38:03 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	1	10/9/2012 7:38:03 PM
Surr: Dibromofluoromethane	110	70-130		%REC	1	10/9/2012 7:38:03 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/9/2012 7:38:03 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (7.5-8')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:30:00 AM

Lab ID: 1210372-023

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/9/2012 10:20:19 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/9/2012 10:20:19 AM
Surr: DNOP	104	77.6-140		%REC	1	10/9/2012 10:20:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/11/2012 1:20:05 AM
Surr: BFB	108	84-116		%REC	1	10/11/2012 1:20:05 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:23:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/11/2012 6:10:37 PM
Arsenic	ND	12		mg/Kg	5	10/15/2012 10:23:51 AM
Barium	110	0.50		mg/Kg	5	10/11/2012 6:10:37 PM
Beryllium	0.83	0.75		mg/Kg	5	10/11/2012 6:10:37 PM
Cadmium	ND	0.50		mg/Kg	5	10/11/2012 6:10:37 PM
Chromium	8.3	1.5		mg/Kg	5	10/15/2012 10:23:51 AM
Cobalt	4.1	1.5		mg/Kg	5	10/11/2012 6:10:37 PM
Iron	13000	500		mg/Kg	500	10/11/2012 6:15:26 PM
Lead	4.1	1.2		mg/Kg	5	10/11/2012 6:10:37 PM
Manganese	390	5.0		mg/Kg	50	10/11/2012 6:13:03 PM
Nickel	6.7	2.5		mg/Kg	5	10/11/2012 6:10:37 PM
Selenium	ND	12		mg/Kg	5	10/15/2012 10:42:12 AM
Silver	ND	1.2		mg/Kg	5	10/11/2012 6:10:37 PM
Vanadium	14	12		mg/Kg	5	10/11/2012 6:10:37 PM
Zinc	14	12		mg/Kg	5	10/15/2012 10:23:51 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Aniline	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Azobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (7.5-8')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:30:00 AM

Lab ID: 1210372-023

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 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	10/10/2012 9:51:16 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Carbazole	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Chrysene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/10/2012 9:51:16 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Fluorene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Isophorone	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Naphthalene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (7.5-8')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:30:00 AM

Lab ID: 1210372-023

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/10/2012 9:51:16 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/10/2012 9:51:16 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Phenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Pyrene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Pyridine	ND	0.50		mg/Kg	1	10/10/2012 9:51:16 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/10/2012 9:51:16 AM
Surr: 2,4,6-Tribromophenol	78.1	21.3-145		%REC	1	10/10/2012 9:51:16 AM
Surr: 2-Fluorobiphenyl	91.1	20-131		%REC	1	10/10/2012 9:51:16 AM
Surr: 2-Fluorophenol	78.6	11.9-130		%REC	1	10/10/2012 9:51:16 AM
Surr: 4-Terphenyl-d14	77.8	25.1-149		%REC	1	10/10/2012 9:51:16 AM
Surr: Nitrobenzene-d5	94.1	25.6-137		%REC	1	10/10/2012 9:51:16 AM
Surr: Phenol-d5	91.1	20.3-132		%REC	1	10/10/2012 9:51:16 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Toluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Ethylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Xylenes, Total	ND	0.00247		mg/Kg	1	10/9/2012 8:08:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2,4-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,3,5-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dichloroethane (EDC)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dibromoethane (EDB)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Naphthalene	ND	0.00247		mg/Kg	1	10/9/2012 8:08:50 PM
1-Methylnaphthalene	ND	0.00494		mg/Kg	1	10/9/2012 8:08:50 PM
2-Methylnaphthalene	ND	0.00494		mg/Kg	1	10/9/2012 8:08:50 PM
Acetone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromodichloromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromoform	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Bromomethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2-Butanone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
Carbon tetrachloride	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Chlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Chloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (7.5-8')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:30:00 AM

Lab ID: 1210372-023

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Chloromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2-Chlorotoluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Carbon disulfide	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
4-Chlorotoluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
cis-1,2-DCE	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
cis-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dibromo-3-chloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Dibromochloromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Dibromomethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,3-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,4-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Dichlorodifluoromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1-Dichloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1-Dichloroethene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,3-Dichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1-Dichloropropene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Hexachlorobutadiene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Isopropylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
4-Isopropyltoluene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Methylene chloride	ND	0.00370		mg/Kg	1	10/9/2012 8:08:50 PM
n-Butylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
2-Hexanone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
n-Propylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
sec-Butylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Styrene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
4-Methyl-2-pentanone	ND	0.0123		mg/Kg	1	10/9/2012 8:08:50 PM
tert-Butylbenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,1,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,2,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Tetrachloroethene (PCE)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
trans-1,2-DCE	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
trans-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2,3-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,2,4-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,1-Trichloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
1,1,2-Trichloroethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Trichloroethene (TCE)	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Trichlorofluoromethane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 (7.5-8')

Project: SWMU NO.1

Collection Date: 10/4/2012 11:30:00 AM

Lab ID: 1210372-023

Matrix: SOIL

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Vinyl chloride	ND	0.00123		mg/Kg	1	10/9/2012 8:08:50 PM
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	1	10/9/2012 8:08:50 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	1	10/9/2012 8:08:50 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/9/2012 8:08:50 PM
Surr: Toluene-d8	94.5	70-130		%REC	1	10/9/2012 8:08:50 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100412

Project: SWMU NO.1

Collection Date: 10/4/2012 5:25:00 PM

Lab ID: 1210372-024

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 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	10/8/2012 7:04:53 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 7:04:53 PM
Surr: DNOP	120	79.5-166		%REC	1	10/8/2012 7:04:53 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/11/2012 2:57:02 PM
Surr: BFB	98.2	69.8-119		%REC	1	10/11/2012 2:57:02 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	ND	0.10		mg/L	1	10/11/2012 4:12:25 AM
Chloride	ND	0.50		mg/L	1	10/8/2012 9:18:45 PM
Sulfate	ND	0.50		mg/L	1	10/8/2012 9:18:45 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Beryllium	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Cadmium	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Chromium	ND	0.0060		mg/L	1	10/10/2012 9:44:39 PM
Cobalt	ND	0.0060		mg/L	1	10/10/2012 9:44:39 PM
Iron	ND	0.020		mg/L	1	10/10/2012 9:44:39 PM
Manganese	ND	0.0020		mg/L	1	10/10/2012 9:44:39 PM
Nickel	ND	0.010		mg/L	1	10/10/2012 9:44:39 PM
Silver	ND	0.0050		mg/L	1	10/10/2012 9:44:39 PM
Vanadium	ND	0.050		mg/L	1	10/10/2012 9:44:39 PM
Zinc	ND	0.010		mg/L	1	10/12/2012 8:28:25 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
Arsenic	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
Lead	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
Selenium	ND	0.0010		mg/L	1	10/17/2012 11:25:09 AM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	ND	0.00020		mg/L	1	10/12/2012 4:54:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Acenaphthylene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Aniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Anthracene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Azobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benz(a)anthracene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzo(a)pyrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/12/2012 12:06:49 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
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100412

Project: SWMU NO.1

Collection Date: 10/4/2012 5:25:00 PM

Lab ID: 1210372-024

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(k)fluoranthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Benzoic acid	ND	20		µg/L	1	10/12/2012 12:06:49 AM
Benzyl alcohol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Butyl benzyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Carbazole	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Chloroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Chloronaphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Chlorophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Chrysene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Di-n-butyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Di-n-octyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Dibenzofuran	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Diethyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Dimethyl phthalate	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dichlorophenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dimethylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dinitrophenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Fluoranthene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Fluorene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachlorobutadiene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Hexachloroethane	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Isophorone	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100412

Project: SWMU NO.1

Collection Date: 10/4/2012 5:25:00 PM

Lab ID: 1210372-024

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Methylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
3+4-Methylphenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Naphthalene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
3-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Nitrobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
4-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Pentachlorophenol	ND	20		µg/L	1	10/12/2012 12:06:49 AM
Phenanthrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Phenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Pyrene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Pyridine	ND	10		µg/L	1	10/12/2012 12:06:49 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:06:49 AM
Surr: 2,4,6-Tribromophenol	77.9	44.2-126		%REC	1	10/12/2012 12:06:49 AM
Surr: 2-Fluorobiphenyl	65.9	37-114		%REC	1	10/12/2012 12:06:49 AM
Surr: 2-Fluorophenol	60.2	23.4-98		%REC	1	10/12/2012 12:06:49 AM
Surr: 4-Terphenyl-d14	59.6	41.3-116		%REC	1	10/12/2012 12:06:49 AM
Surr: Nitrobenzene-d5	78.4	39.5-118		%REC	1	10/12/2012 12:06:49 AM
Surr: Phenol-d5	44.1	20.9-95.9		%REC	1	10/12/2012 12:06:49 AM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Toluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Ethylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Naphthalene	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 6:35:06 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 6:35:06 PM
Acetone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100412

Project: SWMU NO.1

Collection Date: 10/4/2012 5:25:00 PM

Lab ID: 1210372-024

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Bromoform	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 6:35:06 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 6:35:06 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 6:35:06 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB100412

Project: SWMU NO.1

Collection Date: 10/4/2012 5:25:00 PM

Lab ID: 1210372-024

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 6:35:06 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 6:35:06 PM
Xylenes, Total	ND	1.5		µg/L	1	10/9/2012 6:35:06 PM
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%REC	1	10/9/2012 6:35:06 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	10/9/2012 6:35:06 PM
Surr: Dibromofluoromethane	99.8	70-130		%REC	1	10/9/2012 6:35:06 PM
Surr: Toluene-d8	95.5	70-130		%REC	1	10/9/2012 6:35:06 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210372-025

Matrix: TRIP BLANK

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Toluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Ethylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Naphthalene	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 7:03:23 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/9/2012 7:03:23 PM
Acetone	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Bromoform	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
2-Butanone	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
2-Hexanone	ND	10		µg/L	1	10/9/2012 7:03:23 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210372-025

Matrix: TRIP BLANK

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Isopropylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/9/2012 7:03:23 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 7:03:23 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 7:03:23 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 7:03:23 PM
Xylenes, Total	ND	1.5		µg/L	1	10/9/2012 7:03:23 PM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	1	10/9/2012 7:03:23 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	1	10/9/2012 7:03:23 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	10/9/2012 7:03:23 PM
Surr: Toluene-d8	93.9	70-130		%REC	1	10/9/2012 7:03:23 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
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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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-4 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 9:25:00 AM

Lab ID: 1210372-026

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	4.4	1.0		mg/L	1	10/8/2012 7:30:15 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 7:30:15 PM
Surr: DNOP	122	79.5-166		%REC	1	10/8/2012 7:30:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.73	0.050		mg/L	1	10/10/2012 7:47:14 PM
Surr: BFB	145	69.8-119	S	%REC	1	10/10/2012 7:47:14 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Acenaphthylene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Aniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Anthracene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Azobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benz(a)anthracene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(a)pyrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Benzoic acid	ND	20		µg/L	1	10/12/2012 12:36:10 AM
Benzyl alcohol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Butyl benzyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Carbazole	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Chloroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Chloronaphthalene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Chlorophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Chrysene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Di-n-butyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Di-n-octyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Dibenzofuran	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Diethyl phthalate	ND	10		µg/L	1	10/12/2012 12:36:10 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-4 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 9:25:00 AM

Lab ID: 1210372-026

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Dimethyl phthalate	10	10		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dichlorophenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dimethylphenol	850	50		µg/L	5	10/12/2012 10:37:56 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dinitrophenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Fluoranthene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Fluorene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachlorobutadiene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Hexachloroethane	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Isophorone	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Methylphenol	18	10		µg/L	1	10/12/2012 12:36:10 AM
3+4-Methylphenol	18	10		µg/L	1	10/12/2012 12:36:10 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Naphthalene	16	10		µg/L	1	10/12/2012 12:36:10 AM
2-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
3-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Nitroaniline	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Nitrobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
4-Nitrophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Pentachlorophenol	ND	20		µg/L	1	10/12/2012 12:36:10 AM
Phenanthrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Phenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Pyrene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Pyridine	ND	10		µg/L	1	10/12/2012 12:36:10 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/12/2012 12:36:10 AM
Surr: 2,4,6-Tribromophenol	76.9	44.2-126		%REC	1	10/12/2012 12:36:10 AM
Surr: 2-Fluorobiphenyl	67.2	37-114		%REC	1	10/12/2012 12:36:10 AM
Surr: 2-Fluorophenol	53.6	23.4-98		%REC	1	10/12/2012 12:36:10 AM
Surr: 4-Terphenyl-d14	65.1	41.3-116		%REC	1	10/12/2012 12:36:10 AM
Surr: Nitrobenzene-d5	76.1	39.5-118		%REC	1	10/12/2012 12:36:10 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-4 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 9:25:00 AM

Lab ID: 1210372-026

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Surr: Phenol-d5	44.4	20.9-95.9		%REC	1	10/12/2012 12:36:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	24	1.0		µg/L	1	10/9/2012 7:31:32 PM
Toluene	16	1.0		µg/L	1	10/9/2012 7:31:32 PM
Ethylbenzene	16	1.0		µg/L	1	10/9/2012 7:31:32 PM
Methyl tert-butyl ether (MTBE)	59	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,4-Trimethylbenzene	32	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,3,5-Trimethylbenzene	8.0	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Naphthalene	32	2.0		µg/L	1	10/9/2012 7:31:32 PM
1-Methylnaphthalene	11	4.0		µg/L	1	10/9/2012 7:31:32 PM
2-Methylnaphthalene	19	4.0		µg/L	1	10/9/2012 7:31:32 PM
Acetone	130	10		µg/L	1	10/9/2012 7:31:32 PM
Bromobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Bromoform	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Bromomethane	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
2-Butanone	47	10		µg/L	1	10/9/2012 7:31:32 PM
Carbon disulfide	ND	10		µg/L	1	10/9/2012 7:31:32 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Chlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Chloroethane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Chloroform	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Chloromethane	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Dibromomethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/9/2012 7:31:32 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-4 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 9:25:00 AM

Lab ID: 1210372-026

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
2-Hexanone	16	10		µg/L	1	10/9/2012 7:31:32 PM
Isopropylbenzene	1.5	1.0		µg/L	1	10/9/2012 7:31:32 PM
4-Isopropyltoluene	1.5	1.0		µg/L	1	10/9/2012 7:31:32 PM
4-Methyl-2-pentanone	15	10		µg/L	1	10/9/2012 7:31:32 PM
Methylene Chloride	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/9/2012 7:31:32 PM
n-Propylbenzene	2.7	1.0		µg/L	1	10/9/2012 7:31:32 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Styrene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/9/2012 7:31:32 PM
Vinyl chloride	ND	1.0		µg/L	1	10/9/2012 7:31:32 PM
Xylenes, Total	100	1.5		µg/L	1	10/9/2012 7:31:32 PM
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%REC	1	10/9/2012 7:31:32 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/9/2012 7:31:32 PM
Surr: Dibromofluoromethane	97.4	70-130		%REC	1	10/9/2012 7:31:32 PM
Surr: Toluene-d8	94.3	70-130		%REC	1	10/9/2012 7:31:32 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:05:00 PM

Lab ID: 1210372-027

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	1.3	1.0		mg/L	1	10/8/2012 7:55:40 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 7:55:40 PM
Surr: DNOP	127	79.5-166		%REC	1	10/8/2012 7:55:40 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.13	0.050		mg/L	1	10/10/2012 8:17:32 PM
Surr: BFB	107	69.8-119		%REC	1	10/10/2012 8:17:32 PM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	8.8	0.50	*	mg/L	5	10/17/2012 9:44:56 PM
Chloride	1200	50		mg/L	100	10/11/2012 10:27:13 PM
Sulfate	1800	50		mg/L	100	10/11/2012 4:37:15 AM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	3.4	0.020	*	mg/L	5	10/10/2012 7:04:21 PM
Beryllium	0.041	0.020	*	mg/L	5	10/10/2012 7:04:21 PM
Cadmium	ND	0.020		mg/L	5	10/10/2012 7:04:21 PM
Chromium	0.16	0.060	*	mg/L	5	10/12/2012 8:33:04 AM
Cobalt	0.27	0.060		mg/L	5	10/10/2012 7:04:21 PM
Iron	94	2.0	*	mg/L	50	10/12/2012 8:36:20 AM
Manganese	39	0.20	*	mg/L	50	10/12/2012 8:36:20 AM
Nickel	0.55	0.10	*	mg/L	5	10/10/2012 7:04:21 PM
Silver	ND	0.050		mg/L	5	10/10/2012 7:04:21 PM
Vanadium	ND	0.50		mg/L	5	10/10/2012 7:04:21 PM
Zinc	0.88	0.10		mg/L	5	10/12/2012 8:33:04 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0050		mg/L	2.5	10/15/2012 5:14:52 PM
Arsenic	0.054	0.0050	*	mg/L	2.5	10/15/2012 5:14:52 PM
Lead	0.29	0.010	*	mg/L	5	10/16/2012 3:28:37 PM
Selenium	0.024	0.0050		mg/L	2.5	10/15/2012 5:14:52 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	0.00021	0.00020		mg/L	1	10/12/2012 4:57:39 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Acenaphthylene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Aniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Anthracene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Azobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benz(a)anthracene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzo(a)pyrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzo(b)fluoranthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzo(g,h,i)perylene	ND	20		µg/L	2	10/12/2012 11:07:17 AM

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- RL Reporting Detection Limit

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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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:05:00 PM

Lab ID: 1210372-027

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(k)fluoranthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Benzoic acid	ND	40		µg/L	2	10/12/2012 11:07:17 AM
Benzyl alcohol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-chloroethoxy)methane	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-chloroethyl)ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-chloroisopropyl)ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Bis(2-ethylhexyl)phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Bromophenyl phenyl ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Butyl benzyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Carbazole	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Chloro-3-methylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Chloroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Chloronaphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Chlorophenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Chlorophenyl phenyl ether	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Chrysene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Di-n-butyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Di-n-octyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Dibenz(a,h)anthracene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Dibenzofuran	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,2-Dichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,3-Dichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,4-Dichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
3,3'-Dichlorobenzidine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Diethyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Dimethyl phthalate	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dichlorophenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dimethylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4,6-Dinitro-2-methylphenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dinitrophenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
2,4-Dinitrotoluene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,6-Dinitrotoluene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Fluoranthene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Fluorene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachlorobutadiene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachlorocyclopentadiene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Hexachloroethane	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Indeno(1,2,3-cd)pyrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Isophorone	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1-Methylnaphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Methylnaphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
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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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:05:00 PM

Lab ID: 1210372-027

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Methylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
3+4-Methylphenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
N-Nitrosodi-n-propylamine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
N-Nitrosodimethylamine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
N-Nitrosodiphenylamine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Naphthalene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Nitroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
3-Nitroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
4-Nitroaniline	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Nitrobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2-Nitrophenol	240	20		µg/L	2	10/12/2012 11:07:17 AM
4-Nitrophenol	26	20		µg/L	2	10/12/2012 11:07:17 AM
Pentachlorophenol	ND	40		µg/L	2	10/12/2012 11:07:17 AM
Phenanthrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Phenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Pyrene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Pyridine	ND	20		µg/L	2	10/12/2012 11:07:17 AM
1,2,4-Trichlorobenzene	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,4,5-Trichlorophenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
2,4,6-Trichlorophenol	ND	20		µg/L	2	10/12/2012 11:07:17 AM
Surr: 2,4,6-Tribromophenol	50.7	44.2-126		%REC	2	10/12/2012 11:07:17 AM
Surr: 2-Fluorobiphenyl	79.4	37-114		%REC	2	10/12/2012 11:07:17 AM
Surr: 2-Fluorophenol	36.6	23.4-98		%REC	2	10/12/2012 11:07:17 AM
Surr: 4-Terphenyl-d14	78.4	41.3-116		%REC	2	10/12/2012 11:07:17 AM
Surr: Nitrobenzene-d5	89.5	39.5-118		%REC	2	10/12/2012 11:07:17 AM
Surr: Phenol-d5	29.6	20.9-95.9		%REC	2	10/12/2012 11:07:17 AM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Toluene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Ethylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Naphthalene	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2012 3:38:56 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2012 3:38:56 PM
Acetone	270	50		µg/L	5	10/9/2012 7:59:33 PM
Bromobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:05:00 PM

Lab ID: 1210372-027

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Bromoform	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Bromomethane	3.0	3.0		µg/L	1	10/10/2012 3:38:56 PM
2-Butanone	26	10		µg/L	1	10/10/2012 3:38:56 PM
Carbon disulfide	30	10		µg/L	1	10/10/2012 3:38:56 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Chlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Chloroethane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Chloroform	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Chloromethane	3.5	3.0		µg/L	1	10/10/2012 3:38:56 PM
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Dibromomethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
2-Hexanone	ND	10		µg/L	1	10/10/2012 3:38:56 PM
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
4-Isopropyltoluene	1.2	1.0		µg/L	1	10/10/2012 3:38:56 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2012 3:38:56 PM
Methylene Chloride	ND	3.0		µg/L	1	10/10/2012 3:38:56 PM
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2012 3:38:56 PM
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Styrene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2012 3:38:56 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
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- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-6 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:05:00 PM

Lab ID: 1210372-027

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2012 3:38:56 PM
Vinyl chloride	ND	1.0		µg/L	1	10/10/2012 3:38:56 PM
Xylenes, Total	ND	1.5		µg/L	1	10/10/2012 3:38:56 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	10/10/2012 3:38:56 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/10/2012 3:38:56 PM
Surr: Dibromofluoromethane	94.6	70-130		%REC	1	10/10/2012 3:38:56 PM
Surr: Toluene-d8	94.1	70-130		%REC	1	10/10/2012 3:38:56 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:55:00 PM

Lab ID: 1210372-028

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 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	10/8/2012 8:21:01 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/8/2012 8:21:01 PM
Surr: DNOP	125	79.5-166		%REC	1	10/8/2012 8:21:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.22	0.10		mg/L	2	10/10/2012 8:47:37 PM
Surr: BFB	93.6	69.8-119		%REC	2	10/10/2012 8:47:37 PM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	1.1	0.50		mg/L	5	10/17/2012 9:57:20 PM
Chloride	1800	100		mg/L	200	10/11/2012 10:39:38 PM
Sulfate	2200	25		mg/L	50	10/11/2012 5:26:54 AM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	3.2	0.020	*	mg/L	5	10/10/2012 7:11:01 PM
Beryllium	0.051	0.020	*	mg/L	5	10/10/2012 7:11:01 PM
Cadmium	ND	0.020		mg/L	5	10/10/2012 7:11:01 PM
Chromium	0.17	0.060	*	mg/L	5	10/12/2012 8:40:08 AM
Cobalt	0.16	0.060		mg/L	5	10/10/2012 7:11:01 PM
Iron	130	4.0	*	mg/L	100	10/12/2012 10:09:47 AM
Manganese	33	0.20	*	mg/L	50	10/12/2012 8:43:25 AM
Nickel	0.46	0.10	*	mg/L	5	10/10/2012 7:11:01 PM
Silver	ND	0.050		mg/L	5	10/10/2012 7:11:01 PM
Vanadium	ND	0.50		mg/L	5	10/10/2012 7:11:01 PM
Zinc	0.42	0.10		mg/L	5	10/12/2012 8:40:08 AM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0050		mg/L	2.5	10/15/2012 5:18:48 PM
Arsenic	0.046	0.0050	*	mg/L	2.5	10/15/2012 5:18:48 PM
Lead	0.34	0.010	*	mg/L	5	10/16/2012 3:40:27 PM
Selenium	0.022	0.0050		mg/L	2.5	10/15/2012 5:18:48 PM
EPA METHOD 245.1: MERCURY						Analyst: JLF
Mercury	0.00034	0.00020		mg/L	1	10/12/2012 4:59:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Acenaphthylene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Aniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Anthracene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Azobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benz(a)anthracene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzo(a)pyrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/12/2012 1:34:52 AM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:55:00 PM

Lab ID: 1210372-028

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benzo(k)fluoranthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Benzoic acid	ND	20		µg/L	1	10/12/2012 1:34:52 AM
Benzyl alcohol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Butyl benzyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Carbazole	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Chloroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Chloronaphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Chlorophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Chrysene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Di-n-butyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Di-n-octyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Dibenzofuran	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Diethyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Dimethyl phthalate	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dichlorophenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dimethylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dinitrophenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Fluoranthene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Fluorene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachlorobutadiene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Hexachloroethane	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Isophorone	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Methylnaphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM

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- P Sample pH greater than 2
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- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:55:00 PM

Lab ID: 1210372-028

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Methylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
3+4-Methylphenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
N-Nitrosodimethylamine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Naphthalene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Nitroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
3-Nitroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Nitroaniline	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Nitrobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2-Nitrophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
4-Nitrophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Pentachlorophenol	ND	20		µg/L	1	10/12/2012 1:34:52 AM
Phenanthrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Phenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Pyrene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Pyridine	ND	10		µg/L	1	10/12/2012 1:34:52 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/12/2012 1:34:52 AM
Surr: 2,4,6-Tribromophenol	80.3	44.2-126		%REC	1	10/12/2012 1:34:52 AM
Surr: 2-Fluorobiphenyl	78.3	37-114		%REC	1	10/12/2012 1:34:52 AM
Surr: 2-Fluorophenol	55.5	23.4-98		%REC	1	10/12/2012 1:34:52 AM
Surr: 4-Terphenyl-d14	91.4	41.3-116		%REC	1	10/12/2012 1:34:52 AM
Surr: Nitrobenzene-d5	82.7	39.5-118		%REC	1	10/12/2012 1:34:52 AM
Surr: Phenol-d5	32.0	20.9-95.9		%REC	1	10/12/2012 1:34:52 AM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Toluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Ethylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Methyl tert-butyl ether (MTBE)	14	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Naphthalene	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
1-Methylnaphthalene	ND	8.0		µg/L	2	10/9/2012 8:27:45 PM
2-Methylnaphthalene	ND	8.0		µg/L	2	10/9/2012 8:27:45 PM
Acetone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Bromobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Bromodichloromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 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 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:55:00 PM

Lab ID: 1210372-028

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Bromoform	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Bromomethane	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
2-Butanone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Carbon disulfide	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Carbon Tetrachloride	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Chlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Chloroethane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Chloroform	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Chloromethane	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
2-Chlorotoluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
4-Chlorotoluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
cis-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Dibromochloromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Dibromomethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Dichlorodifluoromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1-Dichloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1-Dichloroethene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2-Dichloropropane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,3-Dichloropropane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
2,2-Dichloropropane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
1,1-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
2-Hexanone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Isopropylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	10/9/2012 8:27:45 PM
Methylene Chloride	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
n-Butylbenzene	ND	6.0		µg/L	2	10/9/2012 8:27:45 PM
n-Propylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
sec-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Styrene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
tert-Butylbenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
trans-1,2-DCE	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210372

Date Reported: 11/14/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-7 GW

Project: SWMU NO.1

Collection Date: 10/4/2012 4:55:00 PM

Lab ID: 1210372-028

Matrix: AQUEOUS

Received Date: 10/6/2012 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	10/9/2012 8:27:45 PM
Vinyl chloride	ND	2.0		µg/L	2	10/9/2012 8:27:45 PM
Xylenes, Total	ND	3.0		µg/L	2	10/9/2012 8:27:45 PM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	2	10/9/2012 8:27:45 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	2	10/9/2012 8:27:45 PM
Surr: Dibromofluoromethane	99.8	70-130		%REC	2	10/9/2012 8:27:45 PM
Surr: Toluene-d8	93.7	70-130		%REC	2	10/9/2012 8:27:45 PM

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- 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 #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number	121009050-001	Sampling Date	10/5/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-001D / SWMU 1-1 (2-4)			Sampling Time	2:10 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.26	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	15.9	Percent				%moisture	

Sample Number	121009050-002	Sampling Date	10/5/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-002B / SWMU 1-1 (10-12)			Sampling Time	2:15 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	16.9	Percent				%moisture	

Sample Number	121009050-003	Sampling Date	10/5/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-003C / SWMU 1-1 (13-14)			Sampling Time	2:30 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	10.5	Percent				%moisture	

Sample Number	121009050-004	Sampling Date	10/5/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-004D / SWMU 1-8 (16-18)DUP			Sampling Time	11:10 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	12.4	Percent				%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 #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number	121009050-005	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-005D / SWMU 1-8 (19-20)			Sampling Time	11:25 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	12.7	Percent				%moisture	

Sample Number	121009050-006	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-006D / SWMU 1-8 (4-6)			Sampling Time	10:20 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	14.5	Percent				%moisture	

Sample Number	121009050-007	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-007D / SWMU 1-8 (10-12)			Sampling Time	10:30 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.612	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	6.5	Percent				%moisture	

Sample Number	121009050-008	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-008E / SWMU 1-8 (12-14)			Sampling Time	10:40 AM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.395	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	14.9	Percent				%moisture	

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number	121009050-009	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-009D / SWMU 1-8 (16-18)	Sampling Time	11:10 AM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	12.6	Percent				%moisture	

Sample Number	121009050-010	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-010F / EB100512	Sampling Time	5:40 PM		
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number	121009050-011	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-012B / SWMU 1-4 GW	Sampling Time	7:45 AM		
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0211	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number	121009050-012	Sampling Date	10/5/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-014F / SWMU 1-8 GW	Sampling Time	4:05 PM		
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0180	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number	121009050-013	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-015D / SWMU 1-7 (16-18)	Sampling Time	4:40 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	15.5	Percent				%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
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Client: HALL ENVIRONMENTAL ANALYSIS LAB
Address: 4901 HAWKINS NE SUITE D
ALBUQUERQUE, NM 87109
Attn: ANDY FREEMAN

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number	121009050-014	Sampling Date	10/4/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-016D / SWMU 1-6 (10-11)			Sampling Time	11:45 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	16.2	Percent				%moisture	

Sample Number	121009050-015	Sampling Date	10/4/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-017D / SWMU 1-6 (11-12)			Sampling Time	11:55 AM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	14.6	Percent				%moisture	

Sample Number	121009050-016	Sampling Date	10/4/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-018D / SWMU 1-7 (12-14)			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	10/17/2012	CRW	EPA 335.4	
%moisture	16.1	Percent				%moisture	

Sample Number	121009050-017	Sampling Date	10/4/2012	Date/Time Received	10/9/2012	12:24 PM	
Client Sample ID	1210372-019D / SWMU 1-7 (14-16)			Sampling Time	2:15 PM		
Matrix	Soil	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	21.8	Percent				%moisture	

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number	121009050-018	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-020C / SWMU 1-6 (2-4)	Sampling Time	10:55 AM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	3.2	Percent				%moisture	

Sample Number	121009050-019	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-021C / SWMU 1-6 (2-4) DUP	Sampling Time	10:55 AM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	2.8	Percent				%moisture	

Sample Number	121009050-020	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-022D / SWMU 1-6 (4-6)	Sampling Time	11:15 AM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	15.2	Percent				%moisture	

Sample Number	121009050-021	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-023D / SWMU 1-6 (7.5-8)	Sampling Time	11:30 AM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/17/2012	CRW	EPA 335.4	
%moisture	22.1	Percent				%moisture	

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

Batch #: 121009050
Project Name: 1210372

Analytical Results Report

Sample Number	121009050-022	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-024F / EB100412			Sampling Time	5:25 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

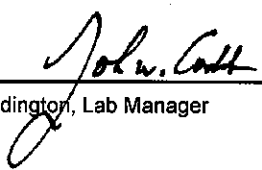
Sample Number	121009050-023	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-027E / SWMU 1-6 GW			Sampling Time	4:05 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0282	mg/L	0.01	10/18/2012	CRW	EPA 335.4	

Sample Number	121009050-024	Sampling Date	10/4/2012	Date/Time Received	10/9/2012 12:24 PM
Client Sample ID	1210372-028E / SWMU 1-7 GW			Sampling Time	4:55 PM
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0515	mg/L	0.01	10/18/2012	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.

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Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Wednesday, October 24, 2012

Page 6 of 6

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 200.7: Metals					
Client ID:	PBW	Batch ID: R6141			RunNo: 6141					
Prep Date:		Analysis Date: 10/10/2012			SeqNo: 176939		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: R6141		RunNo: 6141					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 176940		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			
Beryllium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.50	0.0020	0.5000	0	100	85	115			
Chromium	0.49	0.0060	0.5000	0	97.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.49	0.020	0.5000	0	98.1	85	115			
Manganese	0.49	0.0020	0.5000	0	97.7	85	115			
Nickel	0.47	0.010	0.5000	0	94.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.51	0.050	0.5000	0	101	85	115			

Sample ID	1210368-001BMS		SampType: MS		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R6141		RunNo: 6141					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177005		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0.02430	96.8	70	130			
Beryllium	0.51	0.0020	0.5000	0	102	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.8	70	130			

Sample ID	1210368-001BMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC			Batch ID:	R6141		RunNo:	6141			
Prep Date:				Analysis Date:	10/10/2012		SeqNo:	177006		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Barium	0.51	0.0020	0.5000	0.02430	97.1	70	130	0.302	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210368-001BMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC			Batch ID:	R6141		RunNo:	6141			
Prep Date:				Analysis Date:	10/10/2012		SeqNo:	177006		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	70	130	0.724	20		
Cadmium	0.50	0.0020	0.5000	0	99.0	70	130	1.24	20		

Sample ID	MB-4223		SampType: MBLK		TestCode: EPA Method 200.7: Metals					
Client ID:	PBW		Batch ID: 4223		RunNo: 6141					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 177028		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-4223		SampType: LCS		TestCode: EPA Method 200.7: Metals					
Client ID:	LCSW		Batch ID: 4223		RunNo: 6141					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 177029		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	99.0	85	115			
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.2	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	98.3	85	115			
Nickel	0.48	0.010	0.5000	0	96.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Vanadium	0.51	0.050	0.5000	0	102	85	115			
Zinc	0.49	0.010	0.5000	0	97.9	85	115			

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	POL	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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
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
Zinc	0.51	0.010	0.5000	0	101	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4223		SampType: MBLK		TestCode: EPA 200.8: Metals					
Client ID:	PBW		Batch ID: 4223		RunNo: 6249					
Prep Date:	10/10/2012		Analysis Date: 10/15/2012		SeqNo: 179959		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	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			

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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			

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:	BatchQC		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			

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210585-001CMS			SampType:	MS			TestCode:	EPA 200.8: Metals		
Client ID:	BatchQC			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	
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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4279		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 4279		RunNo: 6215					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 179065		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-4279		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 4279		RunNo: 6215					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 179066		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	97.0	80	120			

Sample ID	1210332-010EMS		SampType: MS		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4279		RunNo: 6215					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 179069		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	96.9	75	125			

Sample ID	1210332-010EMSD			SampType:	MSD		TestCode:	EPA Method 245.1: Mercury			
Client ID:	BatchQC			Batch ID:	4279		RunNo:	6215			
Prep Date:	10/12/2012			Analysis Date:	10/12/2012		SeqNo:	179072		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	97.7	75	125	0.749	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 300.0: Anions				
Client ID:	PBW		Batch ID: R6070			RunNo: 6070				
Prep Date:			Analysis Date: 10/8/2012			SeqNo: 175019		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 300.0: Anions				
Client ID:	LCSW		Batch ID: R6070			RunNo: 6070				
Prep Date:			Analysis Date: 10/8/2012			SeqNo: 175020		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.3	90	110			
Sulfate	9.3	0.50	10.00	0	93.4	90	110			

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 300.0: Anions				
Client ID:	PBW		Batch ID: R6156			RunNo: 6156				
Prep Date:			Analysis Date: 10/10/2012			SeqNo: 177358		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 300.0: Anions				
Client ID:	LCSW		Batch ID: R6156			RunNo: 6156				
Prep Date:			Analysis Date: 10/10/2012			SeqNo: 177359		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	103	90	110			
Sulfate	10	0.50	10.00	0	99.9	90	110			

Sample ID	1210304-001AMS10		SampType: MS			TestCode: EPA Method 300.0: Anions				
Client ID:	BatchQC		Batch ID: R6156			RunNo: 6156				
Prep Date:			Analysis Date: 10/10/2012			SeqNo: 177370		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	6.02	1.00	5.000	1.010	100	76.6	110			
Sulfate	442	5.00	100.0	337.1	105	84.6	122			

Sample ID	1210304-001AMSD1		SampType: MSD			TestCode: EPA Method 300.0: Anions				
Client ID:	BatchQC		Batch ID: R6156			RunNo: 6156				
Prep Date:			Analysis Date: 10/10/2012			SeqNo: 177371		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	5.89	1.00	5.000	1.010	97.6	76.6	110	2.08	20	
Sulfate	433	5.00	100.0	337.1	95.7	84.6	122	2.08	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210527-001AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6156		RunNo: 6156					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177384		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.0	0.10	0.5000	0.5805	92.9	76.6	110			

Sample ID	1210527-001AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6156		RunNo: 6156					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177385		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.5805	95.6	76.6	110	1.28	20	

Sample ID	MB		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBW		Batch ID: R6156		RunNo: 6156					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177422		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R6156		RunNo: 6156					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177423		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.53	0.10	0.5000	0	106	90	110			
Sulfate	9.9	0.50	10.00	0	99.3	90	110			

Sample ID	1210550-001DMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6156		RunNo: 6156					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177425		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.4517	137	76.6	110			S

Sample ID	1210550-001DMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6156		RunNo: 6156					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177426		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.4517	132	76.6	110	2.25	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
- 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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R6177	RunNo:	6177					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178038	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:	R6177	RunNo:	6177					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178039	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	97.2	90	110			

Sample ID	1210607-001AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R6177	RunNo:	6177					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178041	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.5	0.50	5.000	4.628	97.8	87.8	111			

Sample ID	1210607-001AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R6177	RunNo:	6177					
Prep Date:		Analysis Date:	10/11/2012	SeqNo:	178042	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.6	0.50	5.000	4.628	98.5	87.8	111	0.323	20	

Sample ID	MB	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID:	R6330	RunNo:	6330					
Prep Date:		Analysis Date:	10/17/2012	SeqNo:	182236	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								

Sample ID	LCS	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSW	Batch ID:	R6330	RunNo:	6330					
Prep Date:		Analysis Date:	10/17/2012	SeqNo:	182237	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	96.6	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4180	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4180			RunNo: 6071					
Prep Date:	10/8/2012	Analysis Date: 10/9/2012			SeqNo: 175091		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		107	77.6	140			

Sample ID	LCS-4180		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4180		RunNo: 6071					
Prep Date:	10/8/2012		Analysis Date: 10/9/2012		SeqNo: 175092		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	32	10	50.00	0	64.7	52.6	130			
Surr: DNOP	5.1		5.000		101	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4170		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW		Batch ID: 4170		RunNo: 6037					
Prep Date:	10/8/2012		Analysis Date: 10/8/2012		SeqNo: 174724		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		113	79.5	166			

Sample ID	LCS-4170		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 4170		RunNo: 6037					
Prep Date:	10/8/2012		Analysis Date: 10/8/2012		SeqNo: 174725		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.8	1.0	5.000	0	75.1	74	157			
Surr: DNOP	0.50		0.5000		101	79.5	166			

Sample ID	LCSD-4170		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 4170		RunNo: 6037					
Prep Date:	10/8/2012		Analysis Date: 10/8/2012		SeqNo: 174726		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.0	1.0	5.000	0	80.9	74	157	7.55	23	
Surr: DNOP	0.52		0.5000		103	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R6073		RunNo: 6073					
Prep Date:			Analysis Date: 10/8/2012		SeqNo: 175096		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		101	84	116			

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID: R6073			RunNo: 6073					
Prep Date:		Analysis Date: 10/8/2012			SeqNo: 175097		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	85.0	74	117			
Surr: BFB	1100		1000		106	84	116			

Sample ID	MB-4212		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4212		RunNo: 6152					
Prep Date:	10/9/2012		Analysis Date: 10/10/2012		SeqNo: 177240		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		105	84	116			

Sample ID	LCS-4212		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4212		RunNo: 6152					
Prep Date:	10/9/2012		Analysis Date: 10/10/2012		SeqNo: 177241		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	74	117			
Surr: BFB	1100		1000		111	84	116			

Sample ID	1210474-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4212		RunNo: 6152					
Prep Date:	10/9/2012		Analysis Date: 10/10/2012		SeqNo: 177245		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	71	24	24.34	43.50	114	70	130			
Surr: BFB	5400		4869		112	84	116			

Sample ID	1210474-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4212		RunNo: 6152					
Prep Date:	10/9/2012		Analysis Date: 10/10/2012		SeqNo: 177246		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	78	24	24.18	43.50	145	70	130	9.76	22.1	S
Surr: BFB	5300		4836		110	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBW		Batch ID: R6154		RunNo: 6154					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177292		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	22		20.00		110	69.8	119			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSW		Batch ID: R6154		RunNo: 6154					
Prep Date:			Analysis Date: 10/10/2012		SeqNo: 177314		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.48	0.050	0.5000	0	95.6	75.9	119			
Surr: BFB	24		20.00		118	69.8	119			

Sample ID	5ML RB	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBW	Batch ID: R6187			RunNo: 6187					
Prep Date:		Analysis Date: 10/11/2012			SeqNo: 178251		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		86.5	69.8	119			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSW		Batch ID: R6187		RunNo: 6187					
Prep Date:			Analysis Date: 10/11/2012		SeqNo: 178252		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	91.8	75.9	119			
Surr: BFB	20		20.00		97.8	69.8	119			

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4203		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4203			RunNo: 6147				
Prep Date:	10/9/2012		Analysis Date: 10/9/2012			SeqNo: 177089		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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4203		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4203		RunNo: 6147					
Prep Date:	10/9/2012		Analysis Date: 10/9/2012		SeqNo: 177089		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	45.0		50.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	46.4		50.00		92.9	70	130			
Surr: Dibromofluoromethane	49.1		50.00		98.2	70	130			
Surr: Toluene-d8	50.9		50.00		102	70	130			

Sample ID	lcs-4203		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4203		RunNo: 6147					
Prep Date:	10/9/2012		Analysis Date: 10/9/2012		SeqNo: 177092		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	12.6	1.00	12.50	0	101	60	140			
Toluene	10.8	1.00	12.50	0	86.5	60	140			
Chlorobenzene	12.3	1.00	12.50	0	98.5	60	140			
1,1-Dichloroethene	12.9	1.00	12.50	0	103	60	140			
Trichloroethene (TCE)	12.0	1.00	12.50	0	95.8	60	140			
Surr: 1,2-Dichloroethane-d4	44.0		50.00		88.0	70	130			
Surr: 4-Bromofluorobenzene	48.2		50.00		96.4	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4203		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4203		RunNo: 6147					
Prep Date:	10/9/2012		Analysis Date: 10/9/2012		SeqNo: 177092		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	48.2		50.00		96.3	70	130			
Surr: Toluene-d8	43.7		50.00		87.4	70	130			

Sample ID	MB-4229		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4229		RunNo: 6153					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 177265		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								

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4229		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4229			RunNo: 6153				
Prep Date:	10/10/2012		Analysis Date: 10/10/2012			SeqNo: 177265		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
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	45.5		50.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	48.6		50.00		97.2	70	130			
Surr: Dibromofluoromethane	50.8		50.00		102	70	130			
Surr: Toluene-d8	44.6		50.00		89.3	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	LCS-4229		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4229		RunNo: 6153					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 177267		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.19	1.00	8.000	0	102	60	140			
Toluene	8.34	1.00	8.000	0	104	60	140			
Chlorobenzene	8.45	1.00	8.000	0	106	60	140			
1,1-Dichloroethene	9.31	1.00	8.000	0	116	60	140			
Trichloroethene (TCE)	6.81	1.00	8.000	0	85.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.6		50.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	45.3		50.00		90.5	70	130			
Surr: Dibromofluoromethane	51.1		50.00		102	70	130			
Surr: Toluene-d8	51.1		50.00		102	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R6105	RunNo:	6105					
Prep Date:		Analysis Date:	10/9/2012	SeqNo:	175988	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6105			RunNo: 6105					
Prep Date:		Analysis Date: 10/9/2012			SeqNo: 175988		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	9.3		10.00		93.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.8	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R6105			RunNo: 6105					
Prep Date:		Analysis Date: 10/9/2012			SeqNo: 175990		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	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	73.7	122			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.4	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	100ng lcs		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW		Batch ID: R6105		RunNo: 6105					
Prep Date:			Analysis Date: 10/9/2012		SeqNo: 175990		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.6		10.00		95.8	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

Sample ID	1210372-010ams		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	EB100512		Batch ID: R6105		RunNo: 6105					
Prep Date:			Analysis Date: 10/9/2012		SeqNo: 175992		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	114	66.8	128			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.5		10.00		94.8	70	130			

Sample ID	1210372-010amsd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	EB100512		Batch ID: R6105		RunNo: 6105					
Prep Date:			Analysis Date: 10/9/2012		SeqNo: 175993		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	66.8	128	5.11	16.7	
Toluene	22	1.0	20.00	0	108	70	130	1.42	18.7	
Chlorobenzene	22	1.0	20.00	0	108	70	130	0.698	19.5	
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130	11.7	16.7	
Trichloroethene (TCE)	18	1.0	20.00	0	92.4	70	130	4.97	17.5	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.4	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		93.0	70	130	0	0	
Surr: Toluene-d8	9.8		10.00		98.2	70	130	0	0	

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6155			RunNo: 6155					
Prep Date:		Analysis Date: 10/10/2012			SeqNo: 177325		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:

- * 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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6155			RunNo: 6155					
Prep Date:		Analysis Date: 10/10/2012			SeqNo: 177325		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								
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:

* 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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6155			RunNo: 6155					
Prep Date:		Analysis Date: 10/10/2012			SeqNo: 177325		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	9.2		10.00		92.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.2	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R6155			RunNo: 6155					
Prep Date:		Analysis Date: 10/10/2012			SeqNo: 177328		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.9	70	130			
Toluene	19	1.0	20.00	0	93.4	80	120			
Chlorobenzene	19	1.0	20.00	0	94.5	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.9	73.7	122			
Trichloroethene (TCE)	17	1.0	20.00	0	84.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.2	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6255			RunNo: 6255					
Prep Date:		Analysis Date: 10/15/2012			SeqNo: 180303	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW	Batch ID: R6255				RunNo: 6255				
Prep Date:		Analysis Date: 10/15/2012				SeqNo: 180303	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	9.2		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.1	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

Sample ID	100ng lcs	SampType: LCS				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	LCSW	Batch ID: R6255				RunNo: 6255				
Prep Date:		Analysis Date: 10/15/2012				SeqNo: 180305	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	92.3	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	92.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID:	R6255	RunNo:	6255					
Prep Date:		Analysis Date:	10/15/2012	SeqNo:	180305	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.0		10.00		90.3	70	130			
Surr: Toluene-d8	9.4		10.00		93.9	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4168		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4168			RunNo: 6106				
Prep Date:	10/8/2012		Analysis Date: 10/10/2012			SeqNo: 176042	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4168		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	4168		RunNo:	6106			
Prep Date:	10/8/2012		Analysis Date:	10/10/2012		SeqNo:	176042		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	2.8		3.330		84.5	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.670		88.5	20	131			
Surr: 2-Fluorophenol	2.9		3.330		85.8	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		77.1	25.1	149			
Surr: Nitrobenzene-d5	1.5		1.670		90.5	25.6	137			
Surr: Phenol-d5	3.1		3.330		94.0	20.3	132			

Sample ID	lcs-4168		SampType:	LCS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	LCSS		Batch ID:	4168		RunNo:	6106			
Prep Date:	10/8/2012		Analysis Date:	10/10/2012		SeqNo:	176043		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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4168		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4168		RunNo: 6106					
Prep Date:	10/8/2012		Analysis Date: 10/10/2012		SeqNo: 176043		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.20	1.670	0	77.2	49.7	98.1			
4-Chloro-3-methylphenol	2.9	0.50	3.330	0	87.8	43.8	89.1			
2-Chlorophenol	2.8	0.20	3.330	0	83.6	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.1	41	97.4			
2,4-Dinitrotoluene	1.7	0.50	1.670	0	99.6	44.4	104			
N-Nitrosodi-n-propylamine	1.5	0.20	1.670	0	88.3	39.1	86.9			S
4-Nitrophenol	3.0	0.25	3.330	0	88.8	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.1	36.2	80			
Phenol	2.7	0.20	3.330	0	80.3	42.7	92.7			
Pyrene	1.2	0.20	1.670	0	74.5	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	77.2	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.9		3.330		87.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.670		85.7	20	131			
Surr: 2-Fluorophenol	2.6		3.330		77.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		74.9	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		82.0	25.6	137			
Surr: Phenol-d5	2.8		3.330		83.8	20.3	132			

Sample ID	1210372-001BMS	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles						
Client ID:	SWMU 1-1 (2-4')	Batch ID: 4168			RunNo: 6106						
Prep Date:	10/8/2012	Analysis Date: 10/10/2012			SeqNo: 177069		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Acenaphthene	2.1	1.0	1.673	0	127	38.6	100			S	
4-Chloro-3-methylphenol	2.5	2.5	3.336	0	75.3	35.8	108				
2-Chlorophenol	2.2	1.0	3.336	0	65.8	48.2	96.1				
1,4-Dichlorobenzene	ND	1.0	1.673	0	57.2	42.5	97.6				
2,4-Dinitrotoluene	ND	2.5	1.673	0	65.9	51.2	108				
N-Nitrosodi-n-propylamine	ND	1.0	1.673	0	0	31.6	114			S	
4-Nitrophenol	ND	1.3	3.336	0	0	22.7	144			S	
Pentachlorophenol	ND	2.0	3.336	0	53.4	24	109				
Phenol	2.0	1.0	3.336	0	61.3	33.1	108				
Pyrene	1.7	1.0	1.673	1.458	12.8	42.7	98.9			S	
1,2,4-Trichlorobenzene	1.1	1.0	1.673	0	68.7	27.1	118				
Surr: 2,4,6-Tribromophenol	1.8		3.336		55.0	21.3	145				
Surr: 2-Fluorobiphenyl	1.2		1.673		69.0	20	131				
Surr: 2-Fluorophenol	2.1		3.336		62.7	11.9	130				
Surr: 4-Terphenyl-d14	1.2		1.673		73.7	25.1	149				
Surr: Nitrobenzene-d5	0		1.673		0	25.6	137			S	
Surr: Phenol-d5	2.2		3.336		67.4	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210372-001BMSD		SampType: MSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-1 (2-4')		Batch ID: 4168		RunNo: 6106					
Prep Date:	10/8/2012		Analysis Date: 10/10/2012		SeqNo: 177070		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	2.2	0.99	1.661	0	132	38.6	100	3.07	20	S
4-Chloro-3-methylphenol	2.8	2.5	3.312	0	85.5	35.8	108	12.0	20	
2-Chlorophenol	2.5	0.99	3.312	0	76.2	48.2	96.1	14.0	20	
1,4-Dichlorobenzene	1.1	0.99	1.661	0	65.5	42.5	97.6	12.8	20	
2,4-Dinitrotoluene	ND	2.5	1.661	0	63.3	51.2	108	0	20	
N-Nitrosodi-n-propylamine	ND	0.99	1.661	0	0	31.6	114	0	20	S
4-Nitrophenol	3.5	1.2	3.312	0	107	22.7	144	200	20	R
Pentachlorophenol	ND	2.0	3.312	0	59.1	24	109	0	20	
Phenol	2.4	0.99	3.312	0	73.9	33.1	108	18.0	20	
Pyrene	2.0	0.99	1.661	1.458	31.7	42.7	98.9	17.1	20	S
1,2,4-Trichlorobenzene	1.2	0.99	1.661	0	75.0	27.1	118	8.06	20	
Surr: 2,4,6-Tribromophenol	2.3		3.312		70.5	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.3		1.661		79.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.312		74.6	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.661		78.0	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.3		1.661		80.2	25.6	137	0	0	
Surr: Phenol-d5	2.7		3.312		82.1	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4189		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 4189		RunNo: 6186					
Prep Date:	10/9/2012		Analysis Date: 10/11/2012		SeqNo: 178221		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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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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4189		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 4189		RunNo: 6186					
Prep Date:	10/9/2012		Analysis Date: 10/11/2012		SeqNo: 178221		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	170		200.0		87.2	44.2	126			
Surr: 2-Fluorobiphenyl	66		100.0		66.3	37	114			
Surr: 2-Fluorophenol	140		200.0		70.4	23.4	98			
Surr: 4-Terphenyl-d14	73		100.0		72.8	41.3	116			
Surr: Nitrobenzene-d5	86		100.0		86.0	39.5	118			
Surr: Phenol-d5	100		200.0		52.1	20.9	95.9			

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	lcs-4189		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 4189		RunNo: 6186					
Prep Date:	10/9/2012		Analysis Date: 10/11/2012		SeqNo: 178222		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	64	10	100.0	0	63.6	38.2	99.4			
4-Chloro-3-methylphenol	160	10	200.0	0	78.0	35.5	108			
2-Chlorophenol	140	10	200.0	0	69.7	29.8	106			
1,4-Dichlorobenzene	60	10	100.0	0	60.1	32.6	91.5			
2,4-Dinitrotoluene	85	10	100.0	0	84.9	44.7	112			
N-Nitrosodi-n-propylamine	84	10	100.0	0	83.9	38.5	105			
4-Nitrophenol	100	10	200.0	0	50.2	11.6	73.1			
Pentachlorophenol	120	20	200.0	0	62.2	20.2	93			
Phenol	84	10	200.0	0	42.1	23	66.1			
Pyrene	68	10	100.0	0	67.8	40.1	101			
1,2,4-Trichlorobenzene	65	10	100.0	0	64.8	37.7	99.1			
Surr: 2,4,6-Tribromophenol	180		200.0		89.1	44.2	126			
Surr: 2-Fluorobiphenyl	72		100.0		71.9	37	114			
Surr: 2-Fluorophenol	120		200.0		58.5	23.4	98			
Surr: 4-Terphenyl-d14	73		100.0		72.9	41.3	116			
Surr: Nitrobenzene-d5	79		100.0		78.7	39.5	118			
Surr: Phenol-d5	97		200.0		48.5	20.9	95.9			

Sample ID	lcsd-4189		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 4189		RunNo: 6186					
Prep Date:	10/9/2012		Analysis Date: 10/11/2012		SeqNo: 178223		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	5.09	20	
4-Chloro-3-methylphenol	160	10	200.0	0	80.0	35.5	108	2.51	20	
2-Chlorophenol	130	10	200.0	0	66.7	29.8	106	4.41	20	
1,4-Dichlorobenzene	58	10	100.0	0	57.9	32.6	91.5	3.73	20	
2,4-Dinitrotoluene	88	10	100.0	0	87.8	44.7	112	3.45	20	
N-Nitrosodi-n-propylamine	77	10	100.0	0	76.7	38.5	105	8.99	20	
4-Nitrophenol	100	10	200.0	0	52.4	11.6	73.1	4.27	20	
Pentachlorophenol	120	20	200.0	0	60.4	20.2	93	2.94	20	
Phenol	89	10	200.0	0	44.4	23	66.1	5.20	20	
Pyrene	69	10	100.0	0	69.2	40.1	101	2.10	20	
1,2,4-Trichlorobenzene	63	10	100.0	0	62.7	37.7	99.1	3.29	20	
Surr: 2,4,6-Tribromophenol	170		200.0		82.5	44.2	126	0	0	
Surr: 2-Fluorobiphenyl	68		100.0		67.8	37	114	0	0	
Surr: 2-Fluorophenol	120		200.0		59.0	23.4	98	0	0	
Surr: 4-Terphenyl-d14	69		100.0		68.7	41.3	116	0	0	
Surr: Nitrobenzene-d5	75		100.0		75.3	39.5	118	0	0	
Surr: Phenol-d5	97		200.0		48.7	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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4227		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4227		RunNo: 6170					
Prep Date:	10/10/2012		Analysis Date: 10/11/2012		SeqNo: 177797		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4227		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4227		RunNo: 6170					
Prep Date:	10/10/2012		Analysis Date: 10/11/2012		SeqNo: 177798		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	98.5	80	120			

Sample ID	1210372-017CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 1-6 (11-12')		Batch ID: 4227		RunNo: 6170					
Prep Date:	10/10/2012		Analysis Date: 10/11/2012		SeqNo: 177823		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1674	0	104	75	125			

Sample ID	1210372-017CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 1-6 (11-12')		Batch ID: 4227		RunNo: 6170					
Prep Date:	10/10/2012		Analysis Date: 10/11/2012		SeqNo: 177824		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.17	0.033	0.1653	0	104	75	125	1.11	20	

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
Mercury	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:	BatchQC	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			

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210582-006CMSD	SampType:	msd	TestCode:	EPA Method 7471: Mercury					
Client ID:	BatchQC	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	

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#: 1210372

14-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4191	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4191	RunNo:	6163					
Prep Date:	10/9/2012	Analysis Date:	10/11/2012	SeqNo:	177648	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								
Silver	ND	0.25								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4191	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4191	RunNo:	6163					
Prep Date:	10/9/2012	Analysis Date:	10/11/2012	SeqNo:	177649	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	25	2.5	25.00	0	99.4	80	120			
Arsenic	25	2.5	25.00	0	99.0	80	120			
Barium	25	0.10	25.00	0	99.6	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	99.6	80	120			
Cobalt	25	0.30	25.00	0	98.4	80	120			
Iron	25	1.0	25.00	0	102	80	120			
Lead	25	0.25	25.00	0.2260	100	80	120			
Manganese	25	0.10	25.00	0.03150	98.1	80	120			
Nickel	24	0.50	25.00	0	96.4	80	120			
Selenium	23	2.5	25.00	0	92.3	80	120			
Silver	5.1	0.25	5.000	0	101	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	25	2.5	25.00	0	101	80	120			

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210372

Received by/date: AF 10/04/12

Logged By: Lindsay Mangin 10/6/2012 8:15:00 AM

Completed By: Lindsay Mangin 10/7/2012 7:15:35 AM

Reviewed By: mg 10/08/12

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? Added 2mL HNO₃ to 014E, 027D. Added 1mL to 028D for acceptable pH. 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: 6
Adjusted? yes
Checked by: mg

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	0.5	Good	Not Present			

Chain-of-Custody Record									
Client: <u>WESTERN REFINING SW, INC</u> <u>GALLUP REFINERY</u> Mailing Address: <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>									
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation) Accreditation ☐ NELAP ☐ Other ☒ EDD (Type) <u>EXCEL</u>									
Project Manager: <u>SCOTT CROUCH-RPS</u> Sampler: <u>TRACY PAYNE-RPS</u> On Ice: ☒ Yes ☐ No Sample Temperature: <u>0.5°C</u>									
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.			
10/5/12	1020	SOIL	SWMU 1-8 (4-6')	2 VIALS	SOBI	1210372			
				2 VIALS	MEOH				
				3 JARS	—				
	1030		SWMU 1-8 (10-12')	2 VIALS	SOBI	-007			
				2 VIALS	MEOH				
				1 JAR	—				
	1040		SWMU 1-8 (12-14')	2 VIALS	SOBI	-008			
				2 VIALS	MEOH				
				3 JARS	—				
	1110		SWMU 1-8 (16-18')	2 VIALS	SOBI	-009			
				2 VIALS	MEOH				
				3 JARS	—				
Date:	Time:	Relinquished by:	Received by:						
10/6/12	0815	7	10/6/12 0815						
Date:	Time:	Relinquished by:	Received by:						

Turn-Around Time:		☒ Standard ☐ Rush Project Name: <u>SWMU No. 1</u>	
Project #:		Project Manager:	
Sampler: <u>SCOTT CROUCH - RPS</u> <u>TRACY PAYNE - RPS</u>		On Ice: ☒ Yes ☐ No Sample Temperature: <u>0.5°C</u>	
Container Type and #	Preservative Type	HEAL No.	
2 VIALS	SOBI	-604	1210372
2 VIALS	MEOH		
3 JARS	—		
2 VIALS	SOBI	-007	
2 VIALS	MEOH		
1 JAR	—		
2 VIALS	SOBI	-608	
2 VIALS	MEOH		
3 JARS	—		
2 VIALS	SOBI	-009	
2 VIALS	MEOH		
3 JARS	—		
Received by: 		Date	Time
		10/6/12	0815
Received by:		Date	Time



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**
www.hallenvironmental.com

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

Analysis Request

Project Manager: SCOTT CROUCH-RPS

Sampler: TRACY PAYNE-RPS

On Ice: ☒ Yes ☐ No

Sample Temperature: 0.5° C

BE + TMB's (8021)
BE + TPH (Gas only)
(GRO / DRO / MRO)
d 418.1)
d 504.1)
() or 8270 SIMS)
totals
 $\text{NO}_3, \text{NO}_2, \text{PO}_4, \text{SO}_4$
ides / 8082 PCB's
(V) + TPH GRO
(VOA)
RO & DRO
S

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
10/5/12	1020	SOIL	SWMU 1-8 (4-6')	2 VIALS	SOBI	1210372
				2 VIALS	MEOH	-604
				3 JARS	—	
	1030		SWMU 1-8 (10-12')	2 VIALS	SOBI	-007
				2 VIALS	MEOH	
				1 JAR	—	
	1040		SWMU 1-8 (12-14')	2 VIALS	SOBI	-608
				2 VIALS	MEOH	
				3 JARS	—	
	1110		SWMU 1-8 (16-18')	2 VIALS	SOBI	-009
				2 VIALS	MEOH	
				3 JARS	—	

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
96/12	0815	7		10/6/12	0815
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

Chain-of-Custody Record	Client: WESTERN REFINING SW, INC.	Turn-Around Time:
	GALLUP REFINERY	☒ Standard ☐ Rush
Mailing Address: ROUTE 3 Box 7	Project Name:	
GALLUP, NM 87301		SWMU No. 1
Phone #: 505-722-0217	Project #:	

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
------	------	--------	-------------------

10/5/12	57450	GW	5WNU 1-4 GW
---------	-------	----	-------------

1520	GW	SWMU 1-5 GW
1605	GW	SWMU 1-8 GW

[illegible]

Date: 10/6/12	Time: 0915	Relinquished by: [Signature]
Date:	Time:	Relinquished by:

Age Group	Percentage of respondents
18-29	~85%
30-49	~75%
50-69	~65%
70+	~55%

If necessary, samples submitted to Hall Environmental may be subco

Turn-Around Time:	☒ Standard	☐ Rush
Project Name:	SWMU No.1	
Project #:		

Project Manager:	SCOTT CROUCH-RPS
Sampler:	TRACY PAYNE-RPS
On Ice:	☒ Yes ☐ No
Sample Temperature:	0.5 °C

Container Type and #	Preservative Type	HEAL No. 1240377
-------------------------	----------------------	---------------------

1 PLASTIC	HNO ₃	- 012
1 PLASTIC	NaOH	
1 PLASTIC	---	

6V0A	HCL	-013
1AMBER	-	
6V0A	HCL	-014

1 AMBER	—
1 PLASTIC	HNO ₃
1 PLASTIC	NaOH
1 PLASTIC	—

[illegible]

Received by:	Date	Time
Andy	10/6/12	0815
Received by:	Date	Time

10

contracted to other accredited laboratories. This serves as notice of this



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ANALYSIS LABORATORY**
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4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BE + 1MB's (80Z1)	BE + TPH (Gas only)	(GRO / DRO / MRO)	pd 418.1)	pd 504.1)	0 or 8270 SIMS)	stals	1,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	ides / 8082 PCB's	(A) + TPH GRO	(-VOA)	RO 8 DRO	8	
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TPH (Metha
TPH 8015B
BTEX + MT
BTEX + MT
TPH (Metha
EDB (Metha
PAH's (831
RCRA 8 Me
Anions (F,
8081 Pestic
8260B (VO
8270 (Semi
TPH M
METAL

[illegible][illegible][illegible][illegible]

Remarks:

possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record						
Client: <u>WESTERN REFINING SW, INC.</u> <u>GALLUP REFINERY</u> Mailing Address: <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>						
Turn-Around Time: ☒ Standard ☐ Rush Project Name: <u>SWMU No 1</u>						
Project #: _____ Project Manager: _____						
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation) Accreditation: ☐ NELAP ☐ Other _____						
EDD (Type) <u>EXCEL</u>						
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
10/4/12	1145	SOIL	SWMU 1-6 (10-11')	2 VIALS	SOBI	-016
				2 VIALS	MEOH	
				2 JARS	-	
	1155		SWMU 1-6 (11-12')	2 VIALS	SOBI	-017
				2 VIALS	MEOH	
				3 JARS	-	
	1355		SWMU 1-7 (12-14')	2 VIALS	SOBI	-018
				2 VIALS	MEOH	
				3 JARS	-	
	1415		SWMU 1-7 (14-16')	2 VIALS	SOBI	-019
				2 VIALS	MEOH	
				3 JARS	-	
Relinquished by: <u>[Signature]</u> Date: <u>10/6/12</u> Time: <u>0815</u>						
Relinquished by: _____ Date: _____ Time: _____						

Turn-Around Time:	
☒ Standard	☐ Rush
Project Name:	
SWMU No 1	
Project #:	
Project Manager:	
SCOTT CROUCH-RPS	
Sampler: TRACY PAYNE-RPS	
On Ice:	☒ Yes ☐ No
Sample Temperature: 0.5°C	
Container Type and #	Preservative Type
2 VIALS	SOBI
2 VIALS	MeOH
2 JARS	-
2 VIALS	SOBI
2 VIALS	MeOH
3 JARS	-
2 VIALS	SOBI
2 VIALS	MeOH
3 JARS	-
2 VIALS	SOBI
2 VIALS	MeOH
3 JARS	-
HEAL No. 1210372	
-016	
-017	
-018	
-019	
Received by: [Signature]	
Date	Time
10/6/12	6815-
Received by: [Signature]	
Date	Time

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

QA/QC Package:		Accreditation		Project Manager:	
email or Fax#:	Standard	NELAP	Other	Level 4 (Full Validation)	
10/4/12	1145	SOIL	SWMU 1-6 (10-11')	2 VIALS	SOBI
1155				2 VIALS	MeOH
1355				3 JARS	—
1415				2 VIALS	SOBI
				2 VIALS	MeOH
				3 JARS	—
				2 VIALS	SOBI
				2 VIALS	MeOH
				3 JARS	—
				2 VIALS	SOBI
				2 VIALS	MeOH
				3 JARS	—

Remarks:

Received by:	Date	Time
<i>[Signature]</i>	10/6/12	0815-
Received by:	Date	Time

Turn-Around Time:

☒ Standard ☐ Rush	Project Name:	Project #:	Project Manager:
	SWMU No. 1		

SCOTT CROUCH-RPS
 Sampler: TRACY PAYNE-RPS
 On Ice: ☒ Yes ☐ No
 Sample Temperature: 0.5°C

Container Type and #	Preservative Type	HEAL No.
2 VIALS	SGBI	-020
2 VIALS	MEOH	
1 JAR	-	
2 VIALS	SGBI	-021
2 VIALS	MEOH	
1 JAR	-	
2 VIALS	SGBI	-022
2 VIALS	MEOH	
2 JARS	-	
2 VIALS	SGBI	-023
2 VIALS	MEOH	
2 JARS	-	

Received by:	Date	Time
<i>[Signature]</i>	10/6/12	0815
Received by:	Date	Time

contracted to other accredited laboratories. This serves as notice of this



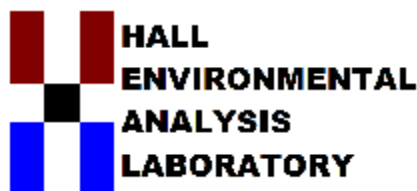
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

[illegible]

Remarks:

[illegible]

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



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

November 12, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210521

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/10/2012 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-001

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	14	10		mg/Kg	1	10/11/2012 12:01:08 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/11/2012 12:01:08 PM
Surr: DNOP	102	77.6-140		%REC	1	10/11/2012 12:01:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 2:11:20 PM
Surr: BFB	106	84-116		%REC	1	10/12/2012 2:11:20 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:47:23 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 3:30:30 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 3:30:30 PM
Barium	220	1.0		mg/Kg	10	10/16/2012 3:55:33 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 3:30:30 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 3:30:30 PM
Chromium	9.5	1.5		mg/Kg	5	10/16/2012 3:30:30 PM
Cobalt	5.1	1.5		mg/Kg	5	10/16/2012 3:30:30 PM
Iron	20000	500		mg/Kg	500	10/16/2012 3:52:52 PM
Lead	9.3	1.2		mg/Kg	5	10/16/2012 3:30:30 PM
Manganese	520	5.0		mg/Kg	50	10/16/2012 3:50:28 PM
Nickel	9.0	2.5		mg/Kg	5	10/16/2012 3:30:30 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 3:30:30 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 3:30:30 PM
Vanadium	24	12		mg/Kg	5	10/16/2012 3:30:30 PM
Zinc	34	12		mg/Kg	5	10/16/2012 3:30:30 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Acenaphthylene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Aniline	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Anthracene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Azobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Benzoic acid	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-001

Matrix: SOIL

Received Date: 10/10/2012 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	10/12/2012 11:37:43 AM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Carbazole	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Chrysene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Dibenzofuran	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/12/2012 11:37:43 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
Fluoranthene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Fluorene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Hexachloroethane	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Isophorone	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2-Methylphenol	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Naphthalene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-001

Matrix: SOIL

Received Date: 10/10/2012 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	10/12/2012 11:37:43 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
Nitrobenzene	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
2-Nitrophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/12/2012 11:37:43 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/12/2012 11:37:43 AM
Phenanthrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Phenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Pyrene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Pyridine	ND	2.5		mg/Kg	1	10/12/2012 11:37:43 AM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/12/2012 11:37:43 AM
Surr: 2,4,6-Tribromophenol	74.0	21.3-145		%REC	1	10/12/2012 11:37:43 AM
Surr: 2-Fluorobiphenyl	65.7	20-131		%REC	1	10/12/2012 11:37:43 AM
Surr: 2-Fluorophenol	68.9	11.9-130		%REC	1	10/12/2012 11:37:43 AM
Surr: 4-Terphenyl-d14	63.6	25.1-149		%REC	1	10/12/2012 11:37:43 AM
Surr: Nitrobenzene-d5	63.3	25.6-137		%REC	1	10/12/2012 11:37:43 AM
Surr: Phenol-d5	70.3	20.3-132		%REC	1	10/12/2012 11:37:43 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.000878	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Toluene	0.00230	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Ethylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Xylenes, Total	0.00328	0.00158		mg/Kg	1	10/10/2012 3:39:11 PM
Methyl tert-butyl ether (MTBE)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2,4-Trimethylbenzene	0.00108	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,3,5-Trimethylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dichloroethane (EDC)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dibromoethane (EDB)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Naphthalene	ND	0.00158		mg/Kg	1	10/10/2012 3:39:11 PM
1-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/10/2012 3:39:11 PM
2-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/10/2012 3:39:11 PM
Acetone	0.0950	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromodichloromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromoform	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Bromomethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2-Butanone	0.00862	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
Carbon tetrachloride	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Chlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Chloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-001

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Chloromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2-Chlorotoluene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Carbon disulfide	ND	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
4-Chlorotoluene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
cis-1,2-DCE	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
cis-1,3-Dichloropropene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dibromo-3-chloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Dibromochloromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Dibromomethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,3-Dichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,4-Dichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Dichlorodifluoromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1-Dichloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1-Dichloroethene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2-Dichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,3-Dichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2,2-Dichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1-Dichloropropene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Hexachlorobutadiene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Isopropylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
4-Isopropyltoluene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Methylene chloride	ND	0.00237		mg/Kg	1	10/10/2012 3:39:11 PM
n-Butylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
2-Hexanone	ND	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
n-Propylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
sec-Butylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Styrene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
4-Methyl-2-pentanone	ND	0.00791		mg/Kg	1	10/10/2012 3:39:11 PM
tert-Butylbenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,1,2-Tetrachloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,2,2-Tetrachloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Tetrachloroethene (PCE)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
trans-1,2-DCE	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
trans-1,3-Dichloropropene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2,3-Trichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,2,4-Trichlorobenzene	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,1-Trichloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
1,1,2-Trichloroethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Trichloroethene (TCE)	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Trichlorofluoromethane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-001

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Vinyl chloride	ND	0.000791		mg/Kg	1	10/10/2012 3:39:11 PM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%REC	1	10/10/2012 3:39:11 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/10/2012 3:39:11 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/10/2012 3:39:11 PM
Surr: Toluene-d8	103	70-130		%REC	1	10/10/2012 3:39:11 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-002

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	11	10		mg/Kg	1	10/11/2012 12:22:46 PM
Motor Oil Range Organics (MRO)	71	51		mg/Kg	1	10/11/2012 12:22:46 PM
Surr: DNOP	106	77.6-140		%REC	1	10/11/2012 12:22:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 2:40:10 PM
Surr: BFB	104	84-116		%REC	1	10/12/2012 2:40:10 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:49:08 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 4:00:28 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:00:28 PM
Barium	180	0.50		mg/Kg	5	10/16/2012 4:00:28 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 4:00:28 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:00:28 PM
Chromium	9.6	1.5		mg/Kg	5	10/16/2012 4:00:28 PM
Cobalt	4.4	1.5		mg/Kg	5	10/16/2012 4:00:28 PM
Iron	10000	500		mg/Kg	500	10/16/2012 4:05:17 PM
Lead	7.8	1.2		mg/Kg	5	10/16/2012 4:00:28 PM
Manganese	290	5.0		mg/Kg	50	10/16/2012 4:02:52 PM
Nickel	8.5	2.5		mg/Kg	5	10/16/2012 4:00:28 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:00:28 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:00:28 PM
Vanadium	18	12		mg/Kg	5	10/16/2012 4:00:28 PM
Zinc	29	12		mg/Kg	5	10/16/2012 4:00:28 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Aniline	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Anthracene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Azobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-002

Matrix: SOIL

Received Date: 10/10/2012 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	10/12/2012 1:05:42 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Carbazole	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Chrysene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/12/2012 1:05:42 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Fluorene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Isophorone	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Naphthalene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-002

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/12/2012 1:05:42 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/12/2012 1:05:42 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Phenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Pyrene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Pyridine	ND	2.5		mg/Kg	1	10/12/2012 1:05:42 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/12/2012 1:05:42 PM
Surr: 2,4,6-Tribromophenol	86.1	21.3-145		%REC	1	10/12/2012 1:05:42 PM
Surr: 2-Fluorobiphenyl	74.9	20-131		%REC	1	10/12/2012 1:05:42 PM
Surr: 2-Fluorophenol	86.0	11.9-130		%REC	1	10/12/2012 1:05:42 PM
Surr: 4-Terphenyl-d14	77.4	25.1-149		%REC	1	10/12/2012 1:05:42 PM
Surr: Nitrobenzene-d5	81.4	25.6-137		%REC	1	10/12/2012 1:05:42 PM
Surr: Phenol-d5	84.0	20.3-132		%REC	1	10/12/2012 1:05:42 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.000940	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Toluene	0.00290	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Ethylbenzene	0.000989	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Xylenes, Total	0.00436	0.00165		mg/Kg	1	10/10/2012 4:10:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2,4-Trimethylbenzene	0.00156	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,3,5-Trimethylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dichloroethane (EDC)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dibromoethane (EDB)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/10/2012 4:10:01 PM
1-Methylnaphthalene	ND	0.00330		mg/Kg	1	10/10/2012 4:10:01 PM
2-Methylnaphthalene	ND	0.00330		mg/Kg	1	10/10/2012 4:10:01 PM
Acetone	0.0811	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromodichloromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromoform	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Bromomethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2-Butanone	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
Carbon tetrachloride	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Chlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Chloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-002

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Chloromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2-Chlorotoluene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Carbon disulfide	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
4-Chlorotoluene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
cis-1,2-DCE	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
cis-1,3-Dichloropropene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dibromo-3-chloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Dibromochloromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Dibromomethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,3-Dichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,4-Dichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Dichlorodifluoromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1-Dichloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1-Dichloroethene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2-Dichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,3-Dichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2,2-Dichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1-Dichloropropene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Hexachlorobutadiene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Isopropylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
4-Isopropyltoluene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Methylene chloride	ND	0.00247		mg/Kg	1	10/10/2012 4:10:01 PM
n-Butylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
2-Hexanone	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
n-Propylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
sec-Butylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Styrene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
4-Methyl-2-pentanone	ND	0.00824		mg/Kg	1	10/10/2012 4:10:01 PM
tert-Butylbenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,1,2-Tetrachloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,2,2-Tetrachloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Tetrachloroethene (PCE)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
trans-1,2-DCE	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
trans-1,3-Dichloropropene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2,3-Trichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,2,4-Trichlorobenzene	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,1-Trichloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
1,1,2-Trichloroethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Trichloroethene (TCE)	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Trichlorofluoromethane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/8/2012 4:05:00 PM

Lab ID: 1210521-002

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Vinyl chloride	ND	0.000824		mg/Kg	1	10/10/2012 4:10:01 PM
Surr: 1,2-Dichloroethane-d4	87.8	70-130		%REC	1	10/10/2012 4:10:01 PM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	1	10/10/2012 4:10:01 PM
Surr: Dibromofluoromethane	89.0	70-130		%REC	1	10/10/2012 4:10:01 PM
Surr: Toluene-d8	93.3	70-130		%REC	1	10/10/2012 4:10:01 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:15:00 PM

Lab ID: 1210521-003

Matrix: SOIL

Received Date: 10/10/2012 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	10/11/2012 8:41:57 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/11/2012 8:41:57 AM
Surr: DNOP	93.7	77.6-140		%REC	1	10/11/2012 8:41:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 3:09:00 PM
Surr: BFB	104	84-116		%REC	1	10/12/2012 3:09:00 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:50:54 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 4:23:04 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:23:04 PM
Barium	330	5.0		mg/Kg	50	10/16/2012 4:25:31 PM
Beryllium	0.86	0.75		mg/Kg	5	10/16/2012 4:23:04 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:23:04 PM
Chromium	7.4	1.5		mg/Kg	5	10/16/2012 4:23:04 PM
Cobalt	4.4	1.5		mg/Kg	5	10/16/2012 4:23:04 PM
Iron	12000	500		mg/Kg	500	10/16/2012 4:27:56 PM
Lead	4.4	1.2		mg/Kg	5	10/16/2012 4:23:04 PM
Manganese	410	5.0		mg/Kg	50	10/16/2012 4:25:31 PM
Nickel	7.0	2.5		mg/Kg	5	10/16/2012 4:23:04 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:23:04 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:23:04 PM
Vanadium	14	12		mg/Kg	5	10/16/2012 4:23:04 PM
Zinc	13	12		mg/Kg	5	10/16/2012 4:23:04 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM

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- 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:15:00 PM

Lab ID: 1210521-003

Matrix: SOIL

Received Date: 10/10/2012 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 7:42:22 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 7:42:22 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM

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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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:15:00 PM

Lab ID: 1210521-003

Matrix: SOIL

Received Date: 10/10/2012 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 7:42:22 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 7:42:22 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 7:42:22 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 7:42:22 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 7:42:22 AM
Surr: 2,4,6-Tribromophenol	79.5	21.3-145		%REC	1	10/12/2012 7:42:22 AM
Surr: 2-Fluorobiphenyl	72.2	20-131		%REC	1	10/12/2012 7:42:22 AM
Surr: 2-Fluorophenol	70.7	11.9-130		%REC	1	10/12/2012 7:42:22 AM
Surr: 4-Terphenyl-d14	71.5	25.1-149		%REC	1	10/12/2012 7:42:22 AM
Surr: Nitrobenzene-d5	71.6	25.6-137		%REC	1	10/12/2012 7:42:22 AM
Surr: Phenol-d5	78.4	20.3-132		%REC	1	10/12/2012 7:42:22 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00215	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Toluene	0.00201	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Ethylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Xylenes, Total	ND	0.00146		mg/Kg	1	10/10/2012 4:40:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2,4-Trimethylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,3,5-Trimethylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dichloroethane (EDC)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dibromoethane (EDB)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Naphthalene	ND	0.00146		mg/Kg	1	10/10/2012 4:40:52 PM
1-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/10/2012 4:40:52 PM
2-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/10/2012 4:40:52 PM
Acetone	0.0549	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromodichloromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromoform	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Bromomethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2-Butanone	0.00925	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
Carbon tetrachloride	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Chlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Chloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:15:00 PM

Lab ID: 1210521-003

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Chloromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2-Chlorotoluene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Carbon disulfide	ND	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
4-Chlorotoluene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
cis-1,2-DCE	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
cis-1,3-Dichloropropene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dibromo-3-chloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Dibromochloromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Dibromomethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,3-Dichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,4-Dichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Dichlorodifluoromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1-Dichloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1-Dichloroethene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2-Dichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,3-Dichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2,2-Dichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1-Dichloropropene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Hexachlorobutadiene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Isopropylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
4-Isopropyltoluene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Methylene chloride	ND	0.00220		mg/Kg	1	10/10/2012 4:40:52 PM
n-Butylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
2-Hexanone	ND	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
n-Propylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
sec-Butylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Styrene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
4-Methyl-2-pentanone	ND	0.00732		mg/Kg	1	10/10/2012 4:40:52 PM
tert-Butylbenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,1,2-Tetrachloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,2,2-Tetrachloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Tetrachloroethene (PCE)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
trans-1,2-DCE	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
trans-1,3-Dichloropropene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2,3-Trichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,2,4-Trichlorobenzene	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,1-Trichloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
1,1,2-Trichloroethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Trichloroethene (TCE)	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Trichlorofluoromethane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:15:00 PM

Lab ID: 1210521-003

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Vinyl chloride	ND	0.000732		mg/Kg	1	10/10/2012 4:40:52 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	10/10/2012 4:40:52 PM
Surr: 4-Bromofluorobenzene	89.0	70-130		%REC	1	10/10/2012 4:40:52 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/10/2012 4:40:52 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	10/10/2012 4:40:52 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (10.5-11.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:30:00 PM

Lab ID: 1210521-004

Matrix: SOIL

Received Date: 10/10/2012 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	9.8		mg/Kg	1	10/11/2012 9:03:31 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/11/2012 9:03:31 AM
Surr: DNOP	97.5	77.6-140		%REC	1	10/11/2012 9:03:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 3:37:47 PM
Surr: BFB	106	84-116		%REC	1	10/12/2012 3:37:47 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:52:41 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
Barium	360	5.0		mg/Kg	50	10/16/2012 4:33:01 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 4:30:35 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:30:35 PM
Chromium	4.9	1.5		mg/Kg	5	10/16/2012 4:30:35 PM
Cobalt	3.9	1.5		mg/Kg	5	10/16/2012 4:30:35 PM
Iron	10000	500		mg/Kg	500	10/16/2012 4:35:27 PM
Lead	5.2	1.2		mg/Kg	5	10/16/2012 4:30:35 PM
Manganese	710	5.0		mg/Kg	50	10/16/2012 4:33:01 PM
Nickel	5.6	2.5		mg/Kg	5	10/16/2012 4:30:35 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:30:35 PM
Vanadium	13	12		mg/Kg	5	10/16/2012 4:30:35 PM
Zinc	ND	12		mg/Kg	5	10/16/2012 4:30:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (10.5-11.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:30:00 PM

Lab ID: 1210521-004

Matrix: SOIL

Received Date: 10/10/2012 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 8:11:38 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 8:11:38 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (10.5-11.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:30:00 PM

Lab ID: 1210521-004

Matrix: SOIL

Received Date: 10/10/2012 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 8:11:38 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 8:11:38 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:11:38 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 8:11:38 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:11:38 AM
Surr: 2,4,6-Tribromophenol	78.0	21.3-145		%REC	1	10/12/2012 8:11:38 AM
Surr: 2-Fluorobiphenyl	72.7	20-131		%REC	1	10/12/2012 8:11:38 AM
Surr: 2-Fluorophenol	70.9	11.9-130		%REC	1	10/12/2012 8:11:38 AM
Surr: 4-Terphenyl-d14	71.2	25.1-149		%REC	1	10/12/2012 8:11:38 AM
Surr: Nitrobenzene-d5	71.3	25.6-137		%REC	1	10/12/2012 8:11:38 AM
Surr: Phenol-d5	78.9	20.3-132		%REC	1	10/12/2012 8:11:38 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00208	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Toluene	0.00112	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Ethylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Xylenes, Total	ND	0.00147		mg/Kg	1	10/10/2012 5:11:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2,4-Trimethylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,3,5-Trimethylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dichloroethane (EDC)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dibromoethane (EDB)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Naphthalene	ND	0.00147		mg/Kg	1	10/10/2012 5:11:46 PM
1-Methylnaphthalene	ND	0.00294		mg/Kg	1	10/10/2012 5:11:46 PM
2-Methylnaphthalene	ND	0.00294		mg/Kg	1	10/10/2012 5:11:46 PM
Acetone	0.0361	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromodichloromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromoform	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Bromomethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2-Butanone	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
Carbon tetrachloride	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Chlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Chloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (10.5-11.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:30:00 PM

Lab ID: 1210521-004

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Chloromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2-Chlorotoluene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Carbon disulfide	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
4-Chlorotoluene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
cis-1,2-DCE	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
cis-1,3-Dichloropropene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dibromo-3-chloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Dibromochloromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Dibromomethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,3-Dichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,4-Dichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Dichlorodifluoromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1-Dichloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1-Dichloroethene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2-Dichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,3-Dichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2,2-Dichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1-Dichloropropene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Hexachlorobutadiene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Isopropylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
4-Isopropyltoluene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Methylene chloride	ND	0.00221		mg/Kg	1	10/10/2012 5:11:46 PM
n-Butylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
2-Hexanone	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
n-Propylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
sec-Butylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Styrene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
4-Methyl-2-pentanone	ND	0.00735		mg/Kg	1	10/10/2012 5:11:46 PM
tert-Butylbenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,1,2-Tetrachloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,2,2-Tetrachloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Tetrachloroethene (PCE)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
trans-1,2-DCE	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
trans-1,3-Dichloropropene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2,3-Trichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,2,4-Trichlorobenzene	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,1-Trichloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
1,1,2-Trichloroethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Trichloroethene (TCE)	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Trichlorofluoromethane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (10.5-11.5')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:30:00 PM

Lab ID: 1210521-004

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Vinyl chloride	ND	0.000735		mg/Kg	1	10/10/2012 5:11:46 PM
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	10/10/2012 5:11:46 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	1	10/10/2012 5:11:46 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/10/2012 5:11:46 PM
Surr: Toluene-d8	93.4	70-130		%REC	1	10/10/2012 5:11:46 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (16-18')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:40:00 PM

Lab ID: 1210521-005

Matrix: SOIL

Received Date: 10/10/2012 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	10/11/2012 9:25:09 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/11/2012 9:25:09 AM
Surr: DNOP	96.6	77.6-140		%REC	1	10/11/2012 9:25:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 4:06:37 PM
Surr: BFB	109	84-116		%REC	1	10/12/2012 4:06:37 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:54:29 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
Barium	480	5.0		mg/Kg	50	10/16/2012 4:40:30 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 4:38:05 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:38:05 PM
Chromium	5.9	1.5		mg/Kg	5	10/16/2012 4:38:05 PM
Cobalt	3.0	1.5		mg/Kg	5	10/16/2012 4:38:05 PM
Iron	9500	500		mg/Kg	500	10/16/2012 4:44:35 PM
Lead	4.9	1.2		mg/Kg	5	10/16/2012 4:38:05 PM
Manganese	790	5.0		mg/Kg	50	10/16/2012 4:40:30 PM
Nickel	4.7	2.5		mg/Kg	5	10/16/2012 4:38:05 PM
Selenium	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:38:05 PM
Vanadium	16	12		mg/Kg	5	10/16/2012 4:38:05 PM
Zinc	ND	12		mg/Kg	5	10/16/2012 4:38:05 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (16-18')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:40:00 PM

Lab ID: 1210521-005

Matrix: SOIL

Received Date: 10/10/2012 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 8:40:52 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 8:40:52 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (16-18')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:40:00 PM

Lab ID: 1210521-005

Matrix: SOIL

Received Date: 10/10/2012 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 8:40:52 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 8:40:52 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 8:40:52 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 8:40:52 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 8:40:52 AM
Surr: 2,4,6-Tribromophenol	74.0	21.3-145		%REC	1	10/12/2012 8:40:52 AM
Surr: 2-Fluorobiphenyl	61.4	20-131		%REC	1	10/12/2012 8:40:52 AM
Surr: 2-Fluorophenol	65.9	11.9-130		%REC	1	10/12/2012 8:40:52 AM
Surr: 4-Terphenyl-d14	60.4	25.1-149		%REC	1	10/12/2012 8:40:52 AM
Surr: Nitrobenzene-d5	68.9	25.6-137		%REC	1	10/12/2012 8:40:52 AM
Surr: Phenol-d5	71.5	20.3-132		%REC	1	10/12/2012 8:40:52 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Toluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Ethylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Xylenes, Total	ND	0.00219		mg/Kg	1	10/11/2012 4:10:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2,4-Trimethylbenzene	0.00202	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,3,5-Trimethylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dichloroethane (EDC)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dibromoethane (EDB)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Naphthalene	ND	0.00219		mg/Kg	1	10/11/2012 4:10:57 PM
1-Methylnaphthalene	ND	0.00437		mg/Kg	1	10/11/2012 4:10:57 PM
2-Methylnaphthalene	ND	0.00437		mg/Kg	1	10/11/2012 4:10:57 PM
Acetone	0.0834	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromodichloromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromoform	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Bromomethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2-Butanone	0.0200	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
Carbon tetrachloride	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Chlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Chloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (16-18')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:40:00 PM

Lab ID: 1210521-005

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Chloromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2-Chlorotoluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Carbon disulfide	ND	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
4-Chlorotoluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
cis-1,2-DCE	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
cis-1,3-Dichloropropene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dibromo-3-chloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Dibromochloromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Dibromomethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,3-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,4-Dichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Dichlorodifluoromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1-Dichloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1-Dichloroethene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2-Dichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,3-Dichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2,2-Dichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1-Dichloropropene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Hexachlorobutadiene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Isopropylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
4-Isopropyltoluene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Methylene chloride	ND	0.00328		mg/Kg	1	10/11/2012 4:10:57 PM
n-Butylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
2-Hexanone	ND	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
n-Propylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
sec-Butylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Styrene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
4-Methyl-2-pentanone	ND	0.0109		mg/Kg	1	10/11/2012 4:10:57 PM
tert-Butylbenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,1,2-Tetrachloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,2,2-Tetrachloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Tetrachloroethene (PCE)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
trans-1,2-DCE	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
trans-1,3-Dichloropropene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2,3-Trichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,2,4-Trichlorobenzene	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,1-Trichloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
1,1,2-Trichloroethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Trichloroethene (TCE)	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Trichlorofluoromethane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (16-18')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:40:00 PM

Lab ID: 1210521-005

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Vinyl chloride	ND	0.00109		mg/Kg	1	10/11/2012 4:10:57 PM
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	1	10/11/2012 4:10:57 PM
Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	1	10/11/2012 4:10:57 PM
Surr: Dibromofluoromethane	94.1	70-130		%REC	1	10/11/2012 4:10:57 PM
Surr: Toluene-d8	110	70-130		%REC	1	10/11/2012 4:10:57 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (24-26')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:55:00 PM

Lab ID: 1210521-006

Matrix: SOIL

Received Date: 10/10/2012 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	10/11/2012 9:46:46 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/11/2012 9:46:46 AM
Surr: DNOP	94.6	77.6-140		%REC	1	10/11/2012 9:46:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 4:35:22 PM
Surr: BFB	135	84-116	S	%REC	1	10/12/2012 4:35:22 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:56:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 4:47:26 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 4:47:26 PM
Barium	160	0.50		mg/Kg	5	10/16/2012 4:47:26 PM
Beryllium	0.89	0.75		mg/Kg	5	10/16/2012 4:47:26 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 4:47:26 PM
Chromium	9.9	1.5		mg/Kg	5	10/16/2012 4:47:26 PM
Cobalt	4.8	1.5		mg/Kg	5	10/16/2012 4:47:26 PM
Iron	13000	500		mg/Kg	500	10/16/2012 5:00:50 PM
Lead	3.4	1.2		mg/Kg	5	10/16/2012 4:47:26 PM
Manganese	640	5.0		mg/Kg	50	10/16/2012 4:58:26 PM
Nickel	7.7	2.5		mg/Kg	5	10/16/2012 4:47:26 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:41:06 AM
Silver	ND	1.2		mg/Kg	5	10/16/2012 4:47:26 PM
Vanadium	23	12		mg/Kg	5	10/16/2012 4:47:26 PM
Zinc	17	12		mg/Kg	5	10/16/2012 4:47:26 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (24-26')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:55:00 PM

Lab ID: 1210521-006

Matrix: SOIL

Received Date: 10/10/2012 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 9:10:07 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:10:07 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Isophorone	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (24-26')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:55:00 PM

Lab ID: 1210521-006

Matrix: SOIL

Received Date: 10/10/2012 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 9:10:07 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:10:07 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:10:07 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Pyridine	ND	0.50		mg/Kg	1	10/12/2012 9:10:07 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:10:07 AM
Surr: 2,4,6-Tribromophenol	81.7	21.3-145		%REC	1	10/12/2012 9:10:07 AM
Surr: 2-Fluorobiphenyl	71.6	20-131		%REC	1	10/12/2012 9:10:07 AM
Surr: 2-Fluorophenol	73.6	11.9-130		%REC	1	10/12/2012 9:10:07 AM
Surr: 4-Terphenyl-d14	70.0	25.1-149		%REC	1	10/12/2012 9:10:07 AM
Surr: Nitrobenzene-d5	56.8	25.6-137		%REC	1	10/12/2012 9:10:07 AM
Surr: Phenol-d5	84.7	20.3-132		%REC	1	10/12/2012 9:10:07 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00396	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Toluene	0.00493	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Ethylbenzene	0.00733	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Xylenes, Total	0.0289	0.00291		mg/Kg	1	10/12/2012 11:13:07 AM
Methyl tert-butyl ether (MTBE)	0.00571	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2,4-Trimethylbenzene	0.0306	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,3,5-Trimethylbenzene	0.00599	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dichloroethane (EDC)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dibromoethane (EDB)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Naphthalene	0.0727	0.00291		mg/Kg	1	10/12/2012 11:13:07 AM
1-Methylnaphthalene	0.0456	0.00582		mg/Kg	1	10/12/2012 11:13:07 AM
2-Methylnaphthalene	0.0659	0.00582		mg/Kg	1	10/12/2012 11:13:07 AM
Acetone	0.0758	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromodichloromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromoform	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Bromomethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2-Butanone	0.0179	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
Carbon tetrachloride	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Chlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Chloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (24-26')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:55:00 PM

Lab ID: 1210521-006

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Chloromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2-Chlorotoluene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Carbon disulfide	ND	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
4-Chlorotoluene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
cis-1,2-DCE	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
cis-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dibromo-3-chloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Dibromochloromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Dibromomethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,3-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,4-Dichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Dichlorodifluoromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1-Dichloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1-Dichloroethene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,3-Dichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2,2-Dichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1-Dichloropropene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Hexachlorobutadiene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Isopropylbenzene	0.00161	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
4-Isopropyltoluene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Methylene chloride	ND	0.00436		mg/Kg	1	10/12/2012 11:13:07 AM
n-Butylbenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
2-Hexanone	ND	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
n-Propylbenzene	0.00318	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
sec-Butylbenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Styrene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
4-Methyl-2-pentanone	ND	0.0145		mg/Kg	1	10/12/2012 11:13:07 AM
tert-Butylbenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,1,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,2,2-Tetrachloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Tetrachloroethene (PCE)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
trans-1,2-DCE	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
trans-1,3-Dichloropropene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2,3-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,2,4-Trichlorobenzene	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,1-Trichloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
1,1,2-Trichloroethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Trichloroethene (TCE)	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Trichlorofluoromethane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (24-26')

Project: SWMU NO.1

Collection Date: 10/8/2012 4:55:00 PM

Lab ID: 1210521-006

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Vinyl chloride	ND	0.00145		mg/Kg	1	10/12/2012 11:13:07 AM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	10/12/2012 11:13:07 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/12/2012 11:13:07 AM
Surr: Dibromofluoromethane	94.5	70-130		%REC	1	10/12/2012 11:13:07 AM
Surr: Toluene-d8	117	70-130		%REC	1	10/12/2012 11:13:07 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (32-34')

Project: SWMU NO.1

Collection Date: 10/8/2012 5:05:00 PM

Lab ID: 1210521-007

Matrix: SOIL

Received Date: 10/10/2012 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	10/11/2012 10:08:19 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/11/2012 10:08:19 AM
Surr: DNOP	101	77.6-140		%REC	1	10/11/2012 10:08:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/12/2012 5:04:07 PM
Surr: BFB	107	84-116		%REC	1	10/12/2012 5:04:07 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 4:58:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/16/2012 5:03:26 PM
Arsenic	ND	12		mg/Kg	5	10/16/2012 5:03:26 PM
Barium	220	0.50		mg/Kg	5	10/16/2012 5:03:26 PM
Beryllium	ND	0.75		mg/Kg	5	10/16/2012 5:03:26 PM
Cadmium	ND	0.50		mg/Kg	5	10/16/2012 5:03:26 PM
Chromium	8.1	1.5		mg/Kg	5	10/16/2012 5:03:26 PM
Cobalt	3.9	1.5		mg/Kg	5	10/16/2012 5:03:26 PM
Iron	24000	500		mg/Kg	500	10/16/2012 5:08:16 PM
Lead	8.6	1.2		mg/Kg	5	10/16/2012 5:03:26 PM
Manganese	730	5.0		mg/Kg	50	10/16/2012 5:05:52 PM
Nickel	5.0	2.5		mg/Kg	5	10/16/2012 5:03:26 PM
Selenium	ND	12		mg/Kg	5	10/23/2012 6:35:11 PM
Silver	ND	1.2		mg/Kg	5	10/16/2012 5:03:26 PM
Vanadium	53	12		mg/Kg	5	10/16/2012 5:03:26 PM
Zinc	ND	12		mg/Kg	5	10/16/2012 5:03:26 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Aniline	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Azobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Benzoic acid	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (32-34')

Project: SWMU NO.1

Collection Date: 10/8/2012 5:05:00 PM

Lab ID: 1210521-007

Matrix: SOIL

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Carbazole	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Chrysene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/12/2012 9:39:23 AM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Fluorene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Isophorone	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2-Methylphenol	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Naphthalene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (32-34')

Project: SWMU NO.1

Collection Date: 10/8/2012 5:05:00 PM

Lab ID: 1210521-007

Matrix: SOIL

Received Date: 10/10/2012 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 9:39:23 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
Nitrobenzene	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/12/2012 9:39:23 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/12/2012 9:39:23 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Phenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Pyrene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Pyridine	ND	0.51		mg/Kg	1	10/12/2012 9:39:23 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/12/2012 9:39:23 AM
Surr: 2,4,6-Tribromophenol	74.2	21.3-145		%REC	1	10/12/2012 9:39:23 AM
Surr: 2-Fluorobiphenyl	65.7	20-131		%REC	1	10/12/2012 9:39:23 AM
Surr: 2-Fluorophenol	64.9	11.9-130		%REC	1	10/12/2012 9:39:23 AM
Surr: 4-Terphenyl-d14	61.6	25.1-149		%REC	1	10/12/2012 9:39:23 AM
Surr: Nitrobenzene-d5	66.0	25.6-137		%REC	1	10/12/2012 9:39:23 AM
Surr: Phenol-d5	75.1	20.3-132		%REC	1	10/12/2012 9:39:23 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00152	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Toluene	0.00137	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Xylenes, Total	ND	0.00209		mg/Kg	1	10/12/2012 12:45:24 PM
Methyl tert-butyl ether (MTBE)	0.00166	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Naphthalene	ND	0.00209		mg/Kg	1	10/12/2012 12:45:24 PM
1-Methylnaphthalene	ND	0.00417		mg/Kg	1	10/12/2012 12:45:24 PM
2-Methylnaphthalene	ND	0.00417		mg/Kg	1	10/12/2012 12:45:24 PM
Acetone	0.0327	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromoform	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (32-34')

Project: SWMU NO.1

Collection Date: 10/8/2012 5:05:00 PM

Lab ID: 1210521-007

Matrix: SOIL

Received Date: 10/10/2012 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	10/12/2012 12:45:24 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Methylene chloride	ND	0.00313		mg/Kg	1	10/12/2012 12:45:24 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Styrene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/12/2012 12:45:24 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 (32-34')

Project: SWMU NO.1

Collection Date: 10/8/2012 5:05:00 PM

Lab ID: 1210521-007

Matrix: SOIL

Received Date: 10/10/2012 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	10/12/2012 12:45:24 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/12/2012 12:45:24 PM
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	10/12/2012 12:45:24 PM
Surr: 4-Bromofluorobenzene	91.5	70-130		%REC	1	10/12/2012 12:45:24 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/12/2012 12:45:24 PM
Surr: Toluene-d8	94.9	70-130		%REC	1	10/12/2012 12:45:24 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210521-008

Matrix: MEOH (SOIL)

Received Date: 10/10/2012 8:00:00 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	10/12/2012 5:32:51 PM
Surr: BFB	105	84-116		%REC	1	10/12/2012 5:32:51 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Toluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Naphthalene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/15/2012 9:14:08 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/15/2012 9:14:08 PM
Acetone	ND	0.75		mg/Kg	1	10/15/2012 9:14:08 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Bromoform	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Bromomethane	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
2-Butanone	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Chloroethane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Chloroform	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Chloromethane	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 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 1210521

Date Reported: 11/12/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210521-008

Matrix: MEOH (SOIL)

Received Date: 10/10/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/15/2012 9:14:08 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/15/2012 9:14:08 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Styrene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Vinyl chloride	ND	0.050		mg/Kg	1	10/15/2012 9:14:08 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/15/2012 9:14:08 PM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%REC	1	10/15/2012 9:14:08 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	1	10/15/2012 9:14:08 PM
Surr: Dibromofluoromethane	90.9	70-130		%REC	1	10/15/2012 9:14:08 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/15/2012 9:14:08 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

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 #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number	121011049-001	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-001D / SWMU 1-24 (0-0.5)			Sampling Time	4:05 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/24/2012	CRW	%moisture	

Sample Number	121011049-002	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-002D / SWMU 1-24 (0-0.5) DUP			Sampling Time	4:05 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	4.5	Percent		10/24/2012	CRW	%moisture	

Sample Number	121011049-003	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-003D / SWMU 1-24 (1.5-2)			Sampling Time	4:15 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/18/2012	CRW	EPA 335.4	
%moisture	8.6	Percent		10/24/2012	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 #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number	121011049-004	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-004D / SWMU 1-24 (10.5-11.5)			Sampling Time	4:30 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	12.6	Percent		10/24/2012	CRW	%moisture	

Sample Number	121011049-005	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-005D / SWMU 1-24 (16-18)			Sampling Time	4:40 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	16.3	Percent		10/24/2012	CRW	%moisture	

Sample Number	121011049-006	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-006D / SWMU 1-24 (24-26)			Sampling Time	4:55 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.908	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	19.4	Percent		10/24/2012	CRW	%moisture	

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

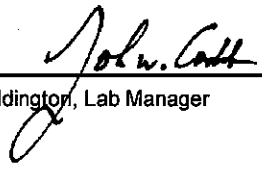
Batch #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number	121011049-007	Sampling Date	10/8/2012	Date/Time Received	10/11/2012 1:10 PM
Client Sample ID	1210521-007D / SWMU 1-24 (32-34)			Sampling Time	5:05 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/22/2012	CRW	EPA 335.4	
%moisture	14	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.

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4226	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4226			RunNo: 6108					
Prep Date:	10/10/2012	Analysis Date: 10/10/2012			SeqNo: 176584		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.4	77.6	140			

Sample ID	LCS-4226		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4226		RunNo: 6108					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 176585		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	52.6	130			
Surr: DNOP	4.0		5.000		79.7	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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:

- * 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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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			

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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4229		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4229		RunNo: 6153					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 177265		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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4229		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	4229		RunNo:	6153			
Prep Date:	10/10/2012		Analysis Date:	10/10/2012		SeqNo:	177265		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	45.5		50.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	48.6		50.00		97.2	70	130			
Surr: Dibromofluoromethane	50.8		50.00		102	70	130			
Surr: Toluene-d8	44.6		50.00		89.3	70	130			

Sample ID	LCS-4229		SampType:	LCS		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	LCSS		Batch ID:	4229		RunNo:	6153			
Prep Date:	10/10/2012		Analysis Date:	10/10/2012		SeqNo:	177267		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.19	1.00	8.000	0	102	60	140			
Toluene	8.34	1.00	8.000	0	104	60	140			
Chlorobenzene	8.45	1.00	8.000	0	106	60	140			
1,1-Dichloroethene	9.31	1.00	8.000	0	116	60	140			
Trichloroethene (TCE)	6.81	1.00	8.000	0	85.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.6		50.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	45.3		50.00		90.5	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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	LCS-4229		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4229		RunNo: 6153					
Prep Date:	10/10/2012		Analysis Date: 10/10/2012		SeqNo: 177267		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	51.1		50.00		102	70	130			
Surr: Toluene-d8	51.1		50.00		102	70	130			

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								

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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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
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								
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			

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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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-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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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			

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			
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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4233		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 4233		RunNo: 6186					
Prep Date:	10/10/2012		Analysis Date: 10/12/2012		SeqNo: 178244		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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4233		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	4233		RunNo:	6186			
Prep Date:	10/10/2012		Analysis Date:	10/12/2012		SeqNo:	178244		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	2.8		3.330		84.7	21.3	145			
Surr: 2-Fluorobiphenyl	1.3		1.670		76.8	20	131			
Surr: 2-Fluorophenol	2.6		3.330		77.5	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		71.4	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		84.7	25.6	137			
Surr: Phenol-d5	3.1		3.330		92.6	20.3	132			

Sample ID	lcs-4233		SampType:	LCS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	LCSS		Batch ID:	4233		RunNo:	6186			
Prep Date:	10/10/2012		Analysis Date:	10/12/2012		SeqNo:	178245		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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4233		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4233		RunNo: 6186					
Prep Date:	10/10/2012		Analysis Date: 10/12/2012		SeqNo: 178245		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	74.2	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	77.5	43.8	89.1			
2-Chlorophenol	2.6	0.20	3.330	0	78.2	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	76.1	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	88.0	44.4	104			
N-Nitrosodi-n-propylamine	1.3	0.20	1.670	0	77.9	39.1	86.9			
4-Nitrophenol	2.7	0.25	3.330	0	80.1	44.2	107			
Pentachlorophenol	2.2	0.40	3.330	0	65.4	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	72.4	34.7	98.8			
1,2,4-Trichlorobenzene	1.3	0.20	1.670	0	79.2	37.8	98.3			
Surr: 2,4,6-Tribromophenol	2.8		3.330		83.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.670		82.0	20	131			
Surr: 2-Fluorophenol	2.3		3.330		70.1	11.9	130			
Surr: 4-Terphenyl-d14	1.2		1.670		71.4	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.670		86.7	25.6	137			
Surr: Phenol-d5	2.8		3.330		82.9	20.3	132			

Sample ID	1210521-001Cms		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-24 (0-0.5')		Batch ID: 4233		RunNo: 6186					
Prep Date:	10/10/2012		Analysis Date: 10/12/2012		SeqNo: 178519		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.5	0.99	1.659	0	89.8	38.6	100			
4-Chloro-3-methylphenol	2.9	2.5	3.309	0	87.7	35.8	108			
2-Chlorophenol	2.8	0.99	3.309	0	83.3	48.2	96.1			
1,4-Dichlorobenzene	1.2	0.99	1.659	0	75.0	42.5	97.6			
2,4-Dinitrotoluene	ND	2.5	1.659	0	93.1	51.2	108			
N-Nitrosodi-n-propylamine	1.4	0.99	1.659	0	83.8	31.6	114			
4-Nitrophenol	3.1	1.2	3.309	0	92.2	22.7	144			
Pentachlorophenol	ND	2.0	3.309	0	59.1	24	109			
Phenol	2.8	0.99	3.309	0	83.5	33.1	108			
Pyrene	1.4	0.99	1.659	0	83.6	42.7	98.9			
1,2,4-Trichlorobenzene	1.4	0.99	1.659	0	82.2	27.1	118			
Surr: 2,4,6-Tribromophenol	3.0		3.309		89.6	21.3	145			
Surr: 2-Fluorobiphenyl	1.4		1.659		86.7	20	131			
Surr: 2-Fluorophenol	2.9		3.309		86.5	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		77.2	25.1	149			
Surr: Nitrobenzene-d5	1.4		1.659		83.5	25.6	137			
Surr: Phenol-d5	3.0		3.309		91.1	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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210521-001Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-24 (0-0.5')	Batch ID:	4233	RunNo:	6186					
Prep Date:	10/10/2012	Analysis Date:	10/12/2012	SeqNo:	178527	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.6	1.0	1.674	0	93.6	38.6	100	5.03	20	
4-Chloro-3-methylphenol	3.1	2.5	3.339	0	93.0	35.8	108	6.82	20	
2-Chlorophenol	2.8	1.0	3.339	0	84.1	48.2	96.1	1.85	20	
1,4-Dichlorobenzene	1.3	1.0	1.674	0	80.3	42.5	97.6	7.71	20	
2,4-Dinitrotoluene	ND	2.5	1.674	0	98.1	51.2	108	0	20	
N-Nitrosodi-n-propylamine	1.5	1.0	1.674	0	86.9	31.6	114	4.52	20	
4-Nitrophenol	3.3	1.3	3.339	0	99.6	22.7	144	8.57	20	
Pentachlorophenol	ND	2.0	3.339	0	59.1	24	109	0	20	
Phenol	2.7	1.0	3.339	0	81.1	33.1	108	1.96	20	
Pyrene	1.6	1.0	1.674	0	95.7	42.7	98.9	14.4	20	
1,2,4-Trichlorobenzene	1.5	1.0	1.674	0	87.1	27.1	118	6.67	20	
Surr: 2,4,6-Tribromophenol	3.0		3.339		88.8	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.674		87.7	20	131	0	0	
Surr: 2-Fluorophenol	2.8		3.339		85.2	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.674		79.0	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.5		1.674		88.2	25.6	137	0	0	
Surr: Phenol-d5	3.0		3.339		88.9	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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:	BatchQC	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:	BatchQC		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	

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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:	SWMU 1-24 (0-0.5')	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#: 1210521

12-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210521-001CMS	SampType: MS		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	SWMU 1-24 (0-0.5')	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:	SWMU 1-24 (0-0.5')	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: 1210521
Received by/date: <u>LM</u> <u>10/10/12</u>		
Logged By: Michelle Garcia	10/10/2012 8:00:00 AM	<i>Michelle Garcia</i>
Completed By: Michelle Garcia	10/10/2012 8:54:43 AM	<i>Michelle Garcia</i>
Reviewed By: <u>LM</u> <u>10/10/12</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? 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° 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	1.8	Good	Not Present			

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: SWMU No. 1

Project #: _____

Project Manager: _____

SCOTT CROUCH-RPS
Sampler: IRACY PAYNE-RPS
On Ice: ☒ Yes ☐ No
Sample Temperature: 1.4

Container Type and #	Preservative Type	HEAL No. 1216521
-------------------------	----------------------	---------------------

ZVIALS	S0B1	-001
ZVIALS	MEDH	

3IARS	-	
ZVIALS	50B1	- 062
ZVIALS	MEOH	

STARS -		
ZVIALS SOBI		-003
ZVIALS MECH		

3 JARS	--	
2 JARS	5081	-004

2 VIALS	MEOH	—	Received by <i>[Signature]</i>	Date <i>1/12/00</i>	Time <i>2:00</i>
---------	------	---	--------------------------------	---------------------	------------------

Received by: 16/10/12 Date 0800 Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BE + TMB's (8021)
BE + TPH (Gas only)
(GRO / DRO / MRO)
4d 48.1)
4d 504.1)
0 or 8270 SIMS)
etals
N₂, NO₂, PO₄, SO₄)
ides / 8082 PCB's
(A) + TPH GRO
-VOA)
MRO & DRO
LS
(Y or N)

TPH (Metho)
TPH 80158B
TPH 80158B
TPH (Metho)
EDB (Metho)
PAH's (831
RCRA 8 Me
Anions (F, C
8081 Pestic
8260B (VO
8270 (Sem
TPH N
META
Air Bubbles

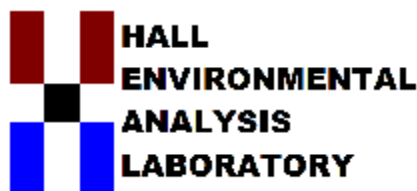
[illegible][illegible]

1

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.

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
+Cn



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.1

OrderNo.: 1210653

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 7 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", 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (0-0.5')

Project: SWMU NO.1

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

Lab ID: 1210653-001

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)	100	9.9		mg/Kg	1	10/15/2012 8:42:53 AM
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	10/15/2012 8:42:53 AM
Surr: DNOP	95.4	77.6-140		%REC	1	10/15/2012 8:42:53 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 5:03:50 AM
Surr: BFB	106	84-116		%REC	1	10/13/2012 5:03:50 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.051	0.033		mg/kg	1	10/16/2012 5:39:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Barium	350	1.0		mg/Kg	10	10/25/2012 12:29:16 PM
Beryllium	0.85	0.30		mg/Kg	2	10/25/2012 9:46:22 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:46:22 AM
Chromium	17	0.60		mg/Kg	2	10/25/2012 9:46:22 AM
Cobalt	4.7	0.60		mg/Kg	2	10/25/2012 9:46:22 AM
Iron	18000	500		mg/Kg	500	11/2/2012 6:21:33 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 9:46:22 AM
Manganese	610	2.0		mg/Kg	20	10/25/2012 2:24:36 PM
Nickel	8.4	1.0		mg/Kg	2	10/25/2012 9:46:22 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:11:45 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
Zinc	22	5.0		mg/Kg	2	10/25/2012 9:46:22 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (0-0.5')

Project: SWMU NO.1

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

Lab ID: 1210653-001

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 11:01:42 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 11:01:42 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 11:01:42 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 11:01:42 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (0-0.5')

Project: SWMU NO.1

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

Lab ID: 1210653-001

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 11:01:42 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 11:01:42 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:01:42 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 11:01:42 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:01:42 AM
Surr: 2,4,6-Tribromophenol	85.3	21.3-145		%REC	1	10/21/2012 11:01:42 AM
Surr: 2-Fluorobiphenyl	86.3	20-131		%REC	1	10/21/2012 11:01:42 AM
Surr: 2-Fluorophenol	78.5	11.9-130		%REC	1	10/21/2012 11:01:42 AM
Surr: 4-Terphenyl-d14	83.1	25.1-149		%REC	1	10/21/2012 11:01:42 AM
Surr: Nitrobenzene-d5	92.0	25.6-137		%REC	1	10/21/2012 11:01:42 AM
Surr: Phenol-d5	80.4	20.3-132		%REC	1	10/21/2012 11:01:42 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00239	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Toluene	0.00454	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Ethylbenzene	0.00119	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Xylenes, Total	0.00526	0.00193		mg/Kg	1	10/12/2012 1:16:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2,4-Trimethylbenzene	0.00193	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,3,5-Trimethylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dichloroethane (EDC)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dibromoethane (EDB)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Naphthalene	ND	0.00193		mg/Kg	1	10/12/2012 1:16:16 PM
1-Methylnaphthalene	ND	0.00385		mg/Kg	1	10/12/2012 1:16:16 PM
2-Methylnaphthalene	ND	0.00385		mg/Kg	1	10/12/2012 1:16:16 PM
Acetone	0.109	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromodichloromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromoform	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Bromomethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2-Butanone	0.0182	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
Carbon tetrachloride	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Chlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Chloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (0-0.5')

Project: SWMU NO.1

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

Lab ID: 1210653-001

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	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Chloromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2-Chlorotoluene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Carbon disulfide	ND	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
4-Chlorotoluene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
cis-1,2-DCE	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
cis-1,3-Dichloropropene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Dibromochloromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Dibromomethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,3-Dichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,4-Dichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Dichlorodifluoromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1-Dichloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1-Dichloroethene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2-Dichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,3-Dichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2,2-Dichloropropane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1-Dichloropropene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Hexachlorobutadiene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Isopropylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
4-Isopropyltoluene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Methylene chloride	ND	0.00289		mg/Kg	1	10/12/2012 1:16:16 PM
n-Butylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
2-Hexanone	ND	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
n-Propylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
sec-Butylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Styrene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
4-Methyl-2-pentanone	0.0116	0.00964		mg/Kg	1	10/12/2012 1:16:16 PM
tert-Butylbenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Tetrachloroethene (PCE)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
trans-1,2-DCE	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
trans-1,3-Dichloropropene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2,3-Trichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,2,4-Trichlorobenzene	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,1-Trichloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
1,1,2-Trichloroethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Trichloroethene (TCE)	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Trichlorofluoromethane	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (0-0.5')

Project: SWMU NO.1

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

Lab ID: 1210653-001

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	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Vinyl chloride	ND	0.000964		mg/Kg	1	10/12/2012 1:16:16 PM
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%REC	1	10/12/2012 1:16:16 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/12/2012 1:16:16 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/12/2012 1:16:16 PM
Surr: Toluene-d8	91.2	70-130		%REC	1	10/12/2012 1:16:16 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:15:00 PM

Lab ID: 1210653-002

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)	100	9.9		mg/Kg	1	10/15/2012 9:49:38 AM
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	10/15/2012 9:49:38 AM
Surr: DNOP	95.1	77.6-140		%REC	1	10/15/2012 9:49:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 5:32:35 AM
Surr: BFB	103	84-116		%REC	1	10/13/2012 5:32:35 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.054	0.033		mg/kg	1	10/16/2012 5:40:53 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Barium	370	1.0		mg/Kg	10	10/25/2012 12:42:54 PM
Beryllium	0.79	0.30		mg/Kg	2	10/25/2012 9:51:37 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:51:37 AM
Chromium	24	0.60		mg/Kg	2	10/25/2012 9:51:37 AM
Cobalt	4.4	0.60		mg/Kg	2	10/25/2012 9:51:37 AM
Iron	16000	500		mg/Kg	500	11/2/2012 6:24:23 AM
Lead	3.1	0.50		mg/Kg	2	10/25/2012 9:51:37 AM
Manganese	570	2.0		mg/Kg	20	10/25/2012 2:27:00 PM
Nickel	7.6	1.0		mg/Kg	2	10/25/2012 9:51:37 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:27:29 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
Zinc	25	5.0		mg/Kg	2	10/25/2012 9:51:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Acenaphthylene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Aniline	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Anthracene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Azobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benz(a)anthracene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(a)pyrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(b)fluoranthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(g,h,i)perylene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzo(k)fluoranthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
Benzyl alcohol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Bis(2-chloroethoxy)methane	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Bis(2-chloroethyl)ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Bis(2-chloroisopropyl)ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:15:00 PM

Lab ID: 1210653-002

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	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
4-Bromophenyl phenyl ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Butyl benzyl phthalate	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Carbazole	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2-Chloronaphthalene	ND	0.51		mg/Kg	1	10/21/2012 12:29:49 PM
2-Chlorophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Chlorophenyl phenyl ether	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Chrysene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
Di-n-octyl phthalate	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
Dibenz(a,h)anthracene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Dibenzofuran	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
1,2-Dichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
1,3-Dichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
1,4-Dichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
3,3'-Dichlorobenzidine	ND	0.51		mg/Kg	1	10/21/2012 12:29:49 PM
Diethyl phthalate	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Dimethyl phthalate	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dichlorophenol	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dimethylphenol	ND	0.61		mg/Kg	1	10/21/2012 12:29:49 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dinitrophenol	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
Fluoranthene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Fluorene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachlorobutadiene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachlorocyclopentadiene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Hexachloroethane	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Indeno(1,2,3-cd)pyrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
1-Methylnaphthalene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2-Methylnaphthalene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
3+4-Methylphenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
N-Nitrosodi-n-propylamine	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
N-Nitrosodiphenylamine	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Naphthalene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2-Nitroaniline	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:15:00 PM

Lab ID: 1210653-002

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	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Nitroaniline	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
2-Nitrophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
4-Nitrophenol	ND	0.51		mg/Kg	1	10/21/2012 12:29:49 PM
Pentachlorophenol	ND	0.82		mg/Kg	1	10/21/2012 12:29:49 PM
Phenanthrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Phenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Pyrene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 12:29:49 PM
1,2,4-Trichlorobenzene	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2,4,5-Trichlorophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
2,4,6-Trichlorophenol	ND	0.41		mg/Kg	1	10/21/2012 12:29:49 PM
Surr: 2,4,6-Tribromophenol	96.2	21.3-145		%REC	1	10/21/2012 12:29:49 PM
Surr: 2-Fluorobiphenyl	89.1	20-131		%REC	1	10/21/2012 12:29:49 PM
Surr: 2-Fluorophenol	84.3	11.9-130		%REC	1	10/21/2012 12:29:49 PM
Surr: 4-Terphenyl-d14	89.0	25.1-149		%REC	1	10/21/2012 12:29:49 PM
Surr: Nitrobenzene-d5	102	25.6-137		%REC	1	10/21/2012 12:29:49 PM
Surr: Phenol-d5	82.5	20.3-132		%REC	1	10/21/2012 12:29:49 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00203	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Toluene	0.00259	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Ethylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Xylenes, Total	0.00305	0.00152		mg/Kg	1	10/12/2012 1:47:09 PM
Methyl tert-butyl ether (MTBE)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2,4-Trimethylbenzene	0.00112	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,3,5-Trimethylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dichloroethane (EDC)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dibromoethane (EDB)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Naphthalene	ND	0.00152		mg/Kg	1	10/12/2012 1:47:09 PM
1-Methylnaphthalene	ND	0.00304		mg/Kg	1	10/12/2012 1:47:09 PM
2-Methylnaphthalene	ND	0.00304		mg/Kg	1	10/12/2012 1:47:09 PM
Acetone	0.0745	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromodichloromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromoform	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Bromomethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2-Butanone	0.00999	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
Carbon tetrachloride	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Chlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Chloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:15:00 PM

Lab ID: 1210653-002

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	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Chloromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2-Chlorotoluene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Carbon disulfide	ND	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
4-Chlorotoluene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
cis-1,2-DCE	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
cis-1,3-Dichloropropene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dibromo-3-chloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Dibromochloromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Dibromomethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,3-Dichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,4-Dichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Dichlorodifluoromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1-Dichloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1-Dichloroethene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2-Dichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,3-Dichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2,2-Dichloropropane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1-Dichloropropene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Hexachlorobutadiene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Isopropylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
4-Isopropyltoluene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Methylene chloride	ND	0.00228		mg/Kg	1	10/12/2012 1:47:09 PM
n-Butylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
2-Hexanone	ND	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
n-Propylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
sec-Butylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Styrene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
4-Methyl-2-pentanone	ND	0.00759		mg/Kg	1	10/12/2012 1:47:09 PM
tert-Butylbenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,1,2-Tetrachloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,2,2-Tetrachloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Tetrachloroethene (PCE)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
trans-1,2-DCE	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
trans-1,3-Dichloropropene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2,3-Trichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,2,4-Trichlorobenzene	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,1-Trichloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
1,1,2-Trichloroethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Trichloroethene (TCE)	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Trichlorofluoromethane	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:15:00 PM

Lab ID: 1210653-002

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	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Vinyl chloride	ND	0.000759		mg/Kg	1	10/12/2012 1:47:09 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/12/2012 1:47:09 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	1	10/12/2012 1:47:09 PM
Surr: Dibromofluoromethane	97.3	70-130		%REC	1	10/12/2012 1:47:09 PM
Surr: Toluene-d8	92.5	70-130		%REC	1	10/12/2012 1:47:09 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8-8.5')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:30:00 PM

Lab ID: 1210653-003

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)	ND	10		mg/Kg	1	10/13/2012 3:25:45 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/13/2012 3:25:45 PM
Surr: DNOP	93.5	77.6-140		%REC	1	10/13/2012 3:25:45 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 6:01:17 AM
Surr: BFB	108	84-116		%REC	1	10/13/2012 6:01:17 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:42:39 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Barium	130	1.0		mg/Kg	10	10/25/2012 12:47:59 PM
Beryllium	0.77	0.30		mg/Kg	2	10/25/2012 10:06:49 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:06:49 AM
Chromium	10	0.60		mg/Kg	2	10/25/2012 10:06:49 AM
Cobalt	4.1	0.60		mg/Kg	2	10/25/2012 10:06:49 AM
Iron	18000	500		mg/Kg	500	11/2/2012 6:27:16 AM
Lead	3.6	0.50		mg/Kg	2	10/25/2012 10:06:49 AM
Manganese	350	1.0		mg/Kg	10	10/25/2012 12:47:59 PM
Nickel	7.3	1.0		mg/Kg	2	10/25/2012 10:06:49 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:32:46 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
Zinc	16	5.0		mg/Kg	2	10/25/2012 10:06:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8-8.5')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:30:00 PM

Lab ID: 1210653-003

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	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 9:35:54 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 9:35:54 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 9:35:54 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Isophorone	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8-8.5')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:30:00 PM

Lab ID: 1210653-003

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 9:35:54 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 9:35:54 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 9:35:54 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Pyridine	ND	0.49		mg/Kg	1	10/20/2012 9:35:54 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 9:35:54 PM
Surr: 2,4,6-Tribromophenol	76.3	21.3-145		%REC	1	10/20/2012 9:35:54 PM
Surr: 2-Fluorobiphenyl	85.2	20-131		%REC	1	10/20/2012 9:35:54 PM
Surr: 2-Fluorophenol	83.5	11.9-130		%REC	1	10/20/2012 9:35:54 PM
Surr: 4-Terphenyl-d14	79.6	25.1-149		%REC	1	10/20/2012 9:35:54 PM
Surr: Nitrobenzene-d5	91.7	25.6-137		%REC	1	10/20/2012 9:35:54 PM
Surr: Phenol-d5	89.2	20.3-132		%REC	1	10/20/2012 9:35:54 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00174	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Toluene	0.00109	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Ethylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Xylenes, Total	ND	0.00210		mg/Kg	1	10/12/2012 5:22:40 PM
Methyl tert-butyl ether (MTBE)	0.0101	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2,4-Trimethylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,3,5-Trimethylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dichloroethane (EDC)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dibromoethane (EDB)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Naphthalene	ND	0.00210		mg/Kg	1	10/12/2012 5:22:40 PM
1-Methylnaphthalene	ND	0.00420		mg/Kg	1	10/12/2012 5:22:40 PM
2-Methylnaphthalene	ND	0.00420		mg/Kg	1	10/12/2012 5:22:40 PM
Acetone	0.0133	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromodichloromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromoform	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Bromomethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2-Butanone	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
Carbon tetrachloride	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Chlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Chloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8-8.5')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:30:00 PM

Lab ID: 1210653-003

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	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Chloromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2-Chlorotoluene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Carbon disulfide	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
4-Chlorotoluene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
cis-1,2-DCE	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
cis-1,3-Dichloropropene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dibromo-3-chloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Dibromochloromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Dibromomethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,3-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,4-Dichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Dichlorodifluoromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1-Dichloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1-Dichloroethene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2-Dichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,3-Dichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2,2-Dichloropropane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1-Dichloropropene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Hexachlorobutadiene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Isopropylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
4-Isopropyltoluene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Methylene chloride	ND	0.00315		mg/Kg	1	10/12/2012 5:22:40 PM
n-Butylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
2-Hexanone	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
n-Propylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
sec-Butylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Styrene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
4-Methyl-2-pentanone	ND	0.0105		mg/Kg	1	10/12/2012 5:22:40 PM
tert-Butylbenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,1,2-Tetrachloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,2,2-Tetrachloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Tetrachloroethene (PCE)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
trans-1,2-DCE	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
trans-1,3-Dichloropropene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2,3-Trichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,2,4-Trichlorobenzene	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,1-Trichloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
1,1,2-Trichloroethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Trichloroethene (TCE)	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Trichlorofluoromethane	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8-8.5')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:30:00 PM

Lab ID: 1210653-003

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	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Vinyl chloride	ND	0.00105		mg/Kg	1	10/12/2012 5:22:40 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%REC	1	10/12/2012 5:22:40 PM
Surr: 4-Bromofluorobenzene	90.6	70-130		%REC	1	10/12/2012 5:22:40 PM
Surr: Dibromofluoromethane	96.8	70-130		%REC	1	10/12/2012 5:22:40 PM
Surr: Toluene-d8	89.1	70-130		%REC	1	10/12/2012 5:22:40 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8.5-9')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:40:00 PM

Lab ID: 1210653-004

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)	ND	10		mg/Kg	1	10/13/2012 3:50:51 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/13/2012 3:50:51 PM
Surr: DNOP	95.1	77.6-140		%REC	1	10/13/2012 3:50:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 6:58:44 AM
Surr: BFB	105	84-116		%REC	1	10/13/2012 6:58:44 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:44:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Barium	130	1.0		mg/Kg	10	10/25/2012 12:54:40 PM
Beryllium	0.83	0.30		mg/Kg	2	10/25/2012 10:12:01 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:12:01 AM
Chromium	8.6	0.60		mg/Kg	2	10/25/2012 10:12:01 AM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 10:12:01 AM
Iron	16000	500		mg/Kg	500	11/2/2012 6:30:08 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 10:12:01 AM
Manganese	230	1.0		mg/Kg	10	10/25/2012 12:54:40 PM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 10:12:01 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:38:00 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
Zinc	13	5.0		mg/Kg	2	10/25/2012 10:12:01 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8.5-9')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:40:00 PM

Lab ID: 1210653-004

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	10/20/2012 10:05:15 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 10:05:15 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 10:05:15 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 10:05:15 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Isophorone	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8.5-9')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:40:00 PM

Lab ID: 1210653-004

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	10/20/2012 10:05:15 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 10:05:15 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:05:15 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Pyridine	ND	0.50		mg/Kg	1	10/20/2012 10:05:15 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:05:15 PM
Surr: 2,4,6-Tribromophenol	82.8	21.3-145		%REC	1	10/20/2012 10:05:15 PM
Surr: 2-Fluorobiphenyl	92.7	20-131		%REC	1	10/20/2012 10:05:15 PM
Surr: 2-Fluorophenol	83.4	11.9-130		%REC	1	10/20/2012 10:05:15 PM
Surr: 4-Terphenyl-d14	81.7	25.1-149		%REC	1	10/20/2012 10:05:15 PM
Surr: Nitrobenzene-d5	97.4	25.6-137		%REC	1	10/20/2012 10:05:15 PM
Surr: Phenol-d5	90.8	20.3-132		%REC	1	10/20/2012 10:05:15 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00221	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Toluene	0.00179	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Ethylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Xylenes, Total	ND	0.00273		mg/Kg	1	10/12/2012 2:18:01 PM
Methyl tert-butyl ether (MTBE)	0.0444	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2,4-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,3,5-Trimethylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dichloroethane (EDC)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dibromoethane (EDB)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Naphthalene	ND	0.00273		mg/Kg	1	10/12/2012 2:18:01 PM
1-Methylnaphthalene	ND	0.00546		mg/Kg	1	10/12/2012 2:18:01 PM
2-Methylnaphthalene	ND	0.00546		mg/Kg	1	10/12/2012 2:18:01 PM
Acetone	0.0148	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromodichloromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromoform	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Bromomethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2-Butanone	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
Carbon tetrachloride	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Chlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Chloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8.5-9')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:40:00 PM

Lab ID: 1210653-004

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	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Chloromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2-Chlorotoluene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Carbon disulfide	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
4-Chlorotoluene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
cis-1,2-DCE	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
cis-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dibromo-3-chloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Dibromochloromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Dibromomethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,3-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,4-Dichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Dichlorodifluoromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1-Dichloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1-Dichloroethene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,3-Dichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2,2-Dichloropropane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1-Dichloropropene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Hexachlorobutadiene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Isopropylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
4-Isopropyltoluene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Methylene chloride	ND	0.00409		mg/Kg	1	10/12/2012 2:18:01 PM
n-Butylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
2-Hexanone	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
n-Propylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
sec-Butylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Styrene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
4-Methyl-2-pentanone	ND	0.0136		mg/Kg	1	10/12/2012 2:18:01 PM
tert-Butylbenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,1,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,2,2-Tetrachloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Tetrachloroethene (PCE)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
trans-1,2-DCE	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
trans-1,3-Dichloropropene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2,3-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,2,4-Trichlorobenzene	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,1-Trichloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
1,1,2-Trichloroethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Trichloroethene (TCE)	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Trichlorofluoromethane	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (8.5-9')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:40:00 PM

Lab ID: 1210653-004

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	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Vinyl chloride	ND	0.00136		mg/Kg	1	10/12/2012 2:18:01 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	10/12/2012 2:18:01 PM
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	1	10/12/2012 2:18:01 PM
Surr: Dibromofluoromethane	94.0	70-130		%REC	1	10/12/2012 2:18:01 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/12/2012 2:18:01 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (12-13')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:55:00 PM

Lab ID: 1210653-005

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)	ND	10		mg/Kg	1	10/13/2012 4:16:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/13/2012 4:16:00 PM
Surr: DNOP	96.3	77.6-140		%REC	1	10/13/2012 4:16:00 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/13/2012 7:27:25 AM
Surr: BFB	110	84-116		%REC	1	10/13/2012 7:27:25 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:46:14 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Barium	210	1.0		mg/Kg	10	10/25/2012 12:59:33 PM
Beryllium	0.72	0.30		mg/Kg	2	10/25/2012 10:17:05 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:17:05 AM
Chromium	15	0.60		mg/Kg	2	10/25/2012 10:17:05 AM
Cobalt	4.1	0.60		mg/Kg	2	10/25/2012 10:17:05 AM
Iron	15000	500		mg/Kg	500	11/2/2012 6:43:03 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 10:17:05 AM
Manganese	530	2.0		mg/Kg	20	10/25/2012 2:32:04 PM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 10:17:05 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 2:43:15 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
Zinc	16	5.0		mg/Kg	2	10/25/2012 10:17:05 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM

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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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (12-13')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:55:00 PM

Lab ID: 1210653-005

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 8:07:34 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 8:07:34 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 8:07:34 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 8:07:34 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 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
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (12-13')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:55:00 PM

Lab ID: 1210653-005

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 8:07:34 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 8:07:34 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:07:34 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 8:07:34 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 8:07:34 AM
Surr: 2,4,6-Tribromophenol	93.7	21.3-145		%REC	1	10/21/2012 8:07:34 AM
Surr: 2-Fluorobiphenyl	88.9	20-131		%REC	1	10/21/2012 8:07:34 AM
Surr: 2-Fluorophenol	85.9	11.9-130		%REC	1	10/21/2012 8:07:34 AM
Surr: 4-Terphenyl-d14	90.4	25.1-149		%REC	1	10/21/2012 8:07:34 AM
Surr: Nitrobenzene-d5	105	25.6-137		%REC	1	10/21/2012 8:07:34 AM
Surr: Phenol-d5	87.5	20.3-132		%REC	1	10/21/2012 8:07:34 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00165	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Toluene	0.000948	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Ethylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Xylenes, Total	ND	0.00184		mg/Kg	1	10/12/2012 2:48:49 PM
Methyl tert-butyl ether (MTBE)	0.00957	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2,4-Trimethylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,3,5-Trimethylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dichloroethane (EDC)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dibromoethane (EDB)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Naphthalene	ND	0.00184		mg/Kg	1	10/12/2012 2:48:49 PM
1-Methylnaphthalene	ND	0.00368		mg/Kg	1	10/12/2012 2:48:49 PM
2-Methylnaphthalene	ND	0.00368		mg/Kg	1	10/12/2012 2:48:49 PM
Acetone	0.0141	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromodichloromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromoform	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Bromomethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2-Butanone	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
Carbon tetrachloride	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Chlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Chloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (12-13')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:55:00 PM

Lab ID: 1210653-005

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	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Chloromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2-Chlorotoluene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Carbon disulfide	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
4-Chlorotoluene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
cis-1,2-DCE	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
cis-1,3-Dichloropropene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dibromo-3-chloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Dibromochloromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Dibromomethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,3-Dichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,4-Dichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Dichlorodifluoromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1-Dichloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1-Dichloroethene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2-Dichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,3-Dichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2,2-Dichloropropane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1-Dichloropropene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Hexachlorobutadiene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Isopropylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
4-Isopropyltoluene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Methylene chloride	ND	0.00276		mg/Kg	1	10/12/2012 2:48:49 PM
n-Butylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
2-Hexanone	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
n-Propylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
sec-Butylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Styrene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
4-Methyl-2-pentanone	ND	0.00921		mg/Kg	1	10/12/2012 2:48:49 PM
tert-Butylbenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,1,2-Tetrachloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,2,2-Tetrachloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Tetrachloroethene (PCE)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
trans-1,2-DCE	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
trans-1,3-Dichloropropene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2,3-Trichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,2,4-Trichlorobenzene	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,1-Trichloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
1,1,2-Trichloroethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Trichloroethene (TCE)	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Trichlorofluoromethane	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (12-13')

Project: SWMU NO.1

Collection Date: 10/10/2012 5:55:00 PM

Lab ID: 1210653-005

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	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Vinyl chloride	ND	0.000921		mg/Kg	1	10/12/2012 2:48:49 PM
Surr: 1,2-Dichloroethane-d4	110	70-130		%REC	1	10/12/2012 2:48:49 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%REC	1	10/12/2012 2:48:49 PM
Surr: Dibromofluoromethane	112	70-130		%REC	1	10/12/2012 2:48:49 PM
Surr: Toluene-d8	90.1	70-130		%REC	1	10/12/2012 2:48:49 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (13-14')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:05:00 PM

Lab ID: 1210653-006

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)	ND	10		mg/Kg	1	10/13/2012 4:41:24 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/13/2012 4:41:24 PM
Surr: DNOP	96.1	77.6-140		%REC	1	10/13/2012 4:41:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 6:38:09 PM
Surr: BFB	94.3	84-116		%REC	1	10/19/2012 6:38:09 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:55:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/25/2012 1:04:23 PM
Arsenic	ND	12		mg/Kg	5	10/25/2012 1:04:23 PM
Barium	280	1.0		mg/Kg	10	10/25/2012 1:06:48 PM
Beryllium	1.2	0.75		mg/Kg	5	10/25/2012 1:04:23 PM
Cadmium	ND	0.50		mg/Kg	5	10/25/2012 1:04:23 PM
Chromium	13	1.5		mg/Kg	5	10/25/2012 1:04:23 PM
Cobalt	6.0	1.5		mg/Kg	5	10/25/2012 1:04:23 PM
Iron	20000	500		mg/Kg	500	11/2/2012 6:45:53 AM
Lead	4.0	1.2		mg/Kg	5	10/25/2012 1:04:23 PM
Manganese	320	1.0		mg/Kg	10	10/25/2012 1:06:48 PM
Nickel	11	2.5		mg/Kg	5	10/25/2012 1:04:23 PM
Selenium	ND	12		mg/Kg	5	10/25/2012 1:04:23 PM
Silver	ND	1.3		mg/Kg	5	10/29/2012 2:48:38 PM
Vanadium	20	12		mg/Kg	5	10/25/2012 1:04:23 PM
Zinc	20	12		mg/Kg	5	10/25/2012 1:04:23 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Benzoic acid	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM

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- 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
- 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (13-14')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:05:00 PM

Lab ID: 1210653-006

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	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Chloro-3-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
4-Chloroaniline	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 10:34:36 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Di-n-butyl phthalate	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 10:34:36 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 10:34:36 PM
4,6-Dinitro-2-methylphenol	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
2,4-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2,6-Dinitrotoluene	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Isophorone	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2-Methylphenol	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (13-14')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:05:00 PM

Lab ID: 1210653-006

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 10:34:36 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
Nitrobenzene	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 10:34:36 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 10:34:36 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Pyridine	ND	0.49		mg/Kg	1	10/20/2012 10:34:36 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 10:34:36 PM
Surr: 2,4,6-Tribromophenol	81.2	21.3-145		%REC	1	10/20/2012 10:34:36 PM
Surr: 2-Fluorobiphenyl	95.7	20-131		%REC	1	10/20/2012 10:34:36 PM
Surr: 2-Fluorophenol	79.8	11.9-130		%REC	1	10/20/2012 10:34:36 PM
Surr: 4-Terphenyl-d14	78.5	25.1-149		%REC	1	10/20/2012 10:34:36 PM
Surr: Nitrobenzene-d5	97.8	25.6-137		%REC	1	10/20/2012 10:34:36 PM
Surr: Phenol-d5	92.6	20.3-132		%REC	1	10/20/2012 10:34:36 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00157	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Toluene	0.00127	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Ethylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Xylenes, Total	ND	0.00168		mg/Kg	1	10/12/2012 3:19:36 PM
Methyl tert-butyl ether (MTBE)	0.00477	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2,4-Trimethylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,3,5-Trimethylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dichloroethane (EDC)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dibromoethane (EDB)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Naphthalene	ND	0.00168		mg/Kg	1	10/12/2012 3:19:36 PM
1-Methylnaphthalene	ND	0.00336		mg/Kg	1	10/12/2012 3:19:36 PM
2-Methylnaphthalene	ND	0.00336		mg/Kg	1	10/12/2012 3:19:36 PM
Acetone	0.0148	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromodichloromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromoform	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Bromomethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2-Butanone	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
Carbon tetrachloride	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Chlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Chloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (13-14')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:05:00 PM

Lab ID: 1210653-006

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	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Chloromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2-Chlorotoluene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Carbon disulfide	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
4-Chlorotoluene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
cis-1,2-DCE	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
cis-1,3-Dichloropropene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dibromo-3-chloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Dibromochloromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Dibromomethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,3-Dichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,4-Dichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Dichlorodifluoromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1-Dichloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1-Dichloroethene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2-Dichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,3-Dichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2,2-Dichloropropane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1-Dichloropropene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Hexachlorobutadiene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Isopropylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
4-Isopropyltoluene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Methylene chloride	ND	0.00252		mg/Kg	1	10/12/2012 3:19:36 PM
n-Butylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
2-Hexanone	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
n-Propylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
sec-Butylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Styrene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
4-Methyl-2-pentanone	ND	0.00840		mg/Kg	1	10/12/2012 3:19:36 PM
tert-Butylbenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,1,2-Tetrachloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,2,2-Tetrachloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Tetrachloroethene (PCE)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
trans-1,2-DCE	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
trans-1,3-Dichloropropene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2,3-Trichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,2,4-Trichlorobenzene	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,1-Trichloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
1,1,2-Trichloroethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Trichloroethene (TCE)	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Trichlorofluoromethane	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (13-14')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:05:00 PM

Lab ID: 1210653-006

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	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Vinyl chloride	ND	0.000840		mg/Kg	1	10/12/2012 3:19:36 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	10/12/2012 3:19:36 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	10/12/2012 3:19:36 PM
Surr: Dibromofluoromethane	92.8	70-130		%REC	1	10/12/2012 3:19:36 PM
Surr: Toluene-d8	88.4	70-130		%REC	1	10/12/2012 3:19:36 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (17-18')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:20:00 PM

Lab ID: 1210653-007

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)	ND	9.8		mg/Kg	1	10/13/2012 5:06:26 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/13/2012 5:06:26 PM
Surr: DNOP	94.9	77.6-140		%REC	1	10/13/2012 5:06:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/19/2012 7:06:58 PM
Surr: BFB	89.2	84-116		%REC	1	10/19/2012 7:06:58 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/16/2012 5:57:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	10/25/2012 1:20:11 PM
Arsenic	ND	12		mg/Kg	5	10/25/2012 1:20:11 PM
Barium	870	5.0		mg/Kg	50	10/25/2012 1:22:36 PM
Beryllium	1.0	0.75		mg/Kg	5	10/25/2012 1:20:11 PM
Cadmium	ND	0.50		mg/Kg	5	10/25/2012 1:20:11 PM
Chromium	13	1.5		mg/Kg	5	10/25/2012 1:20:11 PM
Cobalt	6.2	1.5		mg/Kg	5	10/25/2012 1:20:11 PM
Iron	24000	1000		mg/Kg	1000	11/2/2012 6:48:43 AM
Lead	5.0	1.2		mg/Kg	5	10/25/2012 1:20:11 PM
Manganese	1400	5.0		mg/Kg	50	10/25/2012 1:22:36 PM
Nickel	12	2.5		mg/Kg	5	10/25/2012 1:20:11 PM
Selenium	ND	12		mg/Kg	5	10/25/2012 1:20:11 PM
Silver	ND	1.2		mg/Kg	5	10/29/2012 3:03:53 PM
Vanadium	16	12		mg/Kg	5	10/25/2012 1:20:11 PM
Zinc	21	12		mg/Kg	5	10/25/2012 1:20:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Aniline	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Azobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (17-18')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:20:00 PM

Lab ID: 1210653-007

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 11:03:55 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Carbazole	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/20/2012 11:03:55 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Chrysene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/20/2012 11:03:55 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/20/2012 11:03:55 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Fluorene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Isophorone	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Naphthalene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (17-18')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:20:00 PM

Lab ID: 1210653-007

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 11:03:55 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/20/2012 11:03:55 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/20/2012 11:03:55 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Phenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Pyrene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Pyridine	ND	0.50		mg/Kg	1	10/20/2012 11:03:55 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/20/2012 11:03:55 PM
Surr: 2,4,6-Tribromophenol	76.4	21.3-145		%REC	1	10/20/2012 11:03:55 PM
Surr: 2-Fluorobiphenyl	87.2	20-131		%REC	1	10/20/2012 11:03:55 PM
Surr: 2-Fluorophenol	76.7	11.9-130		%REC	1	10/20/2012 11:03:55 PM
Surr: 4-Terphenyl-d14	73.6	25.1-149		%REC	1	10/20/2012 11:03:55 PM
Surr: Nitrobenzene-d5	89.0	25.6-137		%REC	1	10/20/2012 11:03:55 PM
Surr: Phenol-d5	80.7	20.3-132		%REC	1	10/20/2012 11:03:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.0106	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Toluene	0.00740	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Ethylbenzene	0.00187	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Xylenes, Total	0.00597	0.00161		mg/Kg	1	10/12/2012 3:50:25 PM
Methyl tert-butyl ether (MTBE)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2,4-Trimethylbenzene	0.00196	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,3,5-Trimethylbenzene	0.00122	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dichloroethane (EDC)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dibromoethane (EDB)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Naphthalene	ND	0.00161		mg/Kg	1	10/12/2012 3:50:25 PM
1-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/12/2012 3:50:25 PM
2-Methylnaphthalene	ND	0.00322		mg/Kg	1	10/12/2012 3:50:25 PM
Acetone	0.0127	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromodichloromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromoform	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Bromomethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2-Butanone	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
Carbon tetrachloride	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Chlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Chloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (17-18')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:20:00 PM

Lab ID: 1210653-007

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	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Chloromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2-Chlorotoluene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Carbon disulfide	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
4-Chlorotoluene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
cis-1,2-DCE	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
cis-1,3-Dichloropropene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dibromo-3-chloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Dibromochloromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Dibromomethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,3-Dichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,4-Dichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Dichlorodifluoromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1-Dichloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1-Dichloroethene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2-Dichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,3-Dichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2,2-Dichloropropane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1-Dichloropropene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Hexachlorobutadiene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Isopropylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
4-Isopropyltoluene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Methylene chloride	ND	0.00242		mg/Kg	1	10/12/2012 3:50:25 PM
n-Butylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
2-Hexanone	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
n-Propylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
sec-Butylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Styrene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
4-Methyl-2-pentanone	ND	0.00806		mg/Kg	1	10/12/2012 3:50:25 PM
tert-Butylbenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,1,2-Tetrachloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,2,2-Tetrachloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Tetrachloroethene (PCE)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
trans-1,2-DCE	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
trans-1,3-Dichloropropene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2,3-Trichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,2,4-Trichlorobenzene	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,1-Trichloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
1,1,2-Trichloroethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Trichloroethene (TCE)	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Trichlorofluoromethane	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 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 1210653

Date Reported: 11/15/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 (17-18')

Project: SWMU NO.1

Collection Date: 10/10/2012 6:20:00 PM

Lab ID: 1210653-007

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	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Vinyl chloride	ND	0.000806		mg/Kg	1	10/12/2012 3:50:25 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	10/12/2012 3:50:25 PM
Surr: 4-Bromofluorobenzene	90.4	70-130		%REC	1	10/12/2012 3:50:25 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/12/2012 3:50:25 PM
Surr: Toluene-d8	92.0	70-130		%REC	1	10/12/2012 3:50:25 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.

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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 #: 121017006
Project Name: 1210653

Analytical Results Report

Sample Number	121017006-001	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-001D / SWMU 1-37 (0-0.5)			Sampling Time	5:00 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	3.2	Percent		10/26/2012	CRW	%moisture	

Sample Number	121017006-002	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-002D / SWMU 1-37 (1.5-2)			Sampling Time	5:15 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	10.9	Percent		10/26/2012	CRW	%moisture	

Sample Number	121017006-003	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-003D / SWMU 1-37 (8-8.5)			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	10/24/2012	CRW	EPA 335.4	
%moisture	14.8	Percent		10/26/2012	CRW	%moisture	

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

Batch #: 121017006
Project Name: 1210653

Analytical Results Report

Sample Number	121017006-004	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-004D / SWMU 1-37 (8.5-9)	Sampling Time	5:40 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	19.9	Percent		10/26/2012	CRW	%moisture	

Sample Number	121017006-005	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-005D / SWMU 1-37 (12-13)	Sampling Time	5:55 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	24.2	Percent		10/26/2012	CRW	%moisture	

Sample Number	121017006-006	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-006D / SWMU 1-37 (13-14)	Sampling Time	6:05 PM		
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	17.4	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

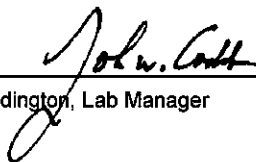
Batch #: 121017006
Project Name: 1210653

Analytical Results Report

Sample Number	121017006-007	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:11 PM
Client Sample ID	1210653-007D / SWMU 1-37 (17-18)			Sampling Time	6:20 PM
Matrix	Soil	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.3	10/24/2012	CRW	EPA 335.4	
%moisture	14.4	Percent		10/30/2012	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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:	SWMU 1-37 (0-0.5')		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:	SWMU 1-37 (0-0.5')		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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:

- * 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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210653-005BMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	SWMU 1-37 (12-13')		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:	SWMU 1-37 (12-13')		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

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	

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup**Project:** SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210653-001CMS		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-37 (0-0.5')		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:	SWMU 1-37 (0-0.5')		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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210653-001CMSD	SampType:	MSD		TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-37 (0-0.5')	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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:

- * 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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210653

15-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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



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: 1210653

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 9:20:33 AM

Michelle Garcia

Reviewed By: *TO* 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: _____

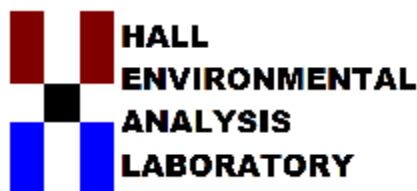
18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	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	

+ 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 19, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210660

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", 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-001

Matrix: AQUEOUS

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	10/12/2012 5:00:43 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/12/2012 5:00:43 PM
Surr: DNOP	114	79.5-166		%REC	1	10/12/2012 5:00:43 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	13	0.50	*	mg/L	5	10/13/2012 8:47:09 PM
Chloride	1500	100		mg/L	200	10/16/2012 10:15:00 PM
Sulfate	110	2.5		mg/L	5	10/13/2012 8:47:09 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	17	0.080	*	mg/L	20	10/23/2012 1:08:09 PM
Beryllium	0.032	0.0040	*	mg/L	1	10/19/2012 8:36:07 PM
Cadmium	ND	0.0040		mg/L	1	10/19/2012 8:36:07 PM
Chromium	0.14	0.012	*	mg/L	1	10/19/2012 8:36:07 PM
Cobalt	0.11	0.012		mg/L	1	10/19/2012 8:36:07 PM
Iron	160	4.0	*	mg/L	100	10/23/2012 1:11:21 PM
Manganese	43	0.40	*	mg/L	100	10/23/2012 1:11:21 PM
Nickel	0.21	0.020	*	mg/L	1	10/19/2012 8:36:07 PM
Silver	ND	0.010		mg/L	1	10/19/2012 8:36:07 PM
Vanadium	0.20	0.10		mg/L	1	10/19/2012 8:36:07 PM
Zinc	0.27	0.020		mg/L	1	10/19/2012 8:36:07 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0050		mg/L	2.5	10/24/2012 4:54:26 PM
Arsenic	0.052	0.0050	*	mg/L	2.5	10/24/2012 4:54:26 PM
Lead	0.49	0.010	*	mg/L	5	10/25/2012 11:03:24 AM
Selenium	0.023	0.0050		mg/L	2.5	11/12/2012 7:32:44 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	0.00022	0.00020		mg/L	1	10/24/2012 7:30:13 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Acenaphthylene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Aniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Anthracene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Azobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benz(a)anthracene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Benzoic acid	ND	20		µg/L	1	10/16/2012 3:23:26 PM
Benzyl alcohol	ND	10		µg/L	1	10/16/2012 3:23:26 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-001

Matrix: AQUEOUS

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-chloroethoxy)methane	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Carbazole	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Chloroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Chlorophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Chrysene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Dibenzofuran	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Diethyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Dimethyl phthalate	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dimethylphenol	230	10		µg/L	1	10/16/2012 3:23:26 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Fluoranthene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Fluorene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Hexachloroethane	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Isophorone	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1-Methylnaphthalene	10	10		µg/L	1	10/16/2012 3:23:26 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Methylphenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
3+4-Methylphenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/16/2012 3:23:26 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-001

Matrix: AQUEOUS

Received Date: 10/12/2012 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	10/16/2012 3:23:26 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Naphthalene	11	10		µg/L	1	10/16/2012 3:23:26 PM
2-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
3-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Nitrobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
4-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Pentachlorophenol	ND	20		µg/L	1	10/16/2012 3:23:26 PM
Phenanthrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Phenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Pyrene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Pyridine	ND	10		µg/L	1	10/16/2012 3:23:26 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:23:26 PM
Surr: 2,4,6-Tribromophenol	81.9	44.2-126		%REC	1	10/16/2012 3:23:26 PM
Surr: 2-Fluorobiphenyl	69.7	37-114		%REC	1	10/16/2012 3:23:26 PM
Surr: 2-Fluorophenol	55.0	23.4-98		%REC	1	10/16/2012 3:23:26 PM
Surr: 4-Terphenyl-d14	68.1	41.3-116		%REC	1	10/16/2012 3:23:26 PM
Surr: Nitrobenzene-d5	74.1	39.5-118		%REC	1	10/16/2012 3:23:26 PM
Surr: Phenol-d5	49.5	20.9-95.9		%REC	1	10/16/2012 3:23:26 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	20	5.0		µg/L	5	10/17/2012 8:29:42 PM
Toluene	18	5.0		µg/L	5	10/17/2012 8:29:42 PM
Ethylbenzene	8.9	5.0		µg/L	5	10/17/2012 8:29:42 PM
Methyl tert-butyl ether (MTBE)	65	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,4-Trimethylbenzene	15	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Naphthalene	22	10		µg/L	5	10/17/2012 8:29:42 PM
1-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 8:29:42 PM
2-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 8:29:42 PM
Acetone	52	50		µg/L	5	10/17/2012 8:29:42 PM
Bromobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Bromodichloromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Bromoform	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Bromomethane	ND	15		µg/L	5	10/17/2012 8:29:42 PM
2-Butanone	ND	50		µg/L	5	10/17/2012 8:29:42 PM

Qualifiers:

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- 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-001

Matrix: AQUEOUS

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	50		µg/L	5	10/17/2012 8:29:42 PM
Carbon Tetrachloride	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Chlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Chloroethane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Chloroform	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Chloromethane	ND	15		µg/L	5	10/17/2012 8:29:42 PM
2-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
4-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
cis-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Dibromochloromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Dibromomethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
2,2-Dichloropropane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
2-Hexanone	ND	50		µg/L	5	10/17/2012 8:29:42 PM
Isopropylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	10/17/2012 8:29:42 PM
Methylene Chloride	ND	15		µg/L	5	10/17/2012 8:29:42 PM
n-Butylbenzene	ND	15		µg/L	5	10/17/2012 8:29:42 PM
n-Propylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
sec-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Styrene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
tert-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
trans-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-001

Matrix: AQUEOUS

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	10/17/2012 8:29:42 PM
Vinyl chloride	ND	5.0		µg/L	5	10/17/2012 8:29:42 PM
Xylenes, Total	38	7.5		µg/L	5	10/17/2012 8:29:42 PM
Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	5	10/17/2012 8:29:42 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	5	10/17/2012 8:29:42 PM
Surr: Dibromofluoromethane	93.5	70-130		%REC	5	10/17/2012 8:29:42 PM
Surr: Toluene-d8	93.9	70-130		%REC	5	10/17/2012 8:29:42 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	1.9	0.25		mg/L	5	10/20/2012 4:11:59 PM
Surr: BFB	94.0	70-130		%REC	5	10/20/2012 4:11:59 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW DUP

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-002

Matrix: AQUEOUS

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	10/12/2012 5:25:56 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/12/2012 5:25:56 PM
Surr: DNOP	113	79.5-166		%REC	1	10/12/2012 5:25:56 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	13	0.50	*	mg/L	5	10/13/2012 9:11:58 PM
Chloride	1500	100		mg/L	200	10/16/2012 10:27:24 PM
Sulfate	100	2.5		mg/L	5	10/13/2012 9:11:58 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	20	0.080	*	mg/L	20	10/23/2012 1:26:06 PM
Beryllium	0.032	0.0040	*	mg/L	1	10/19/2012 8:55:06 PM
Cadmium	ND	0.0040		mg/L	1	10/19/2012 8:55:06 PM
Chromium	0.16	0.012	*	mg/L	1	10/19/2012 8:55:06 PM
Cobalt	0.11	0.012		mg/L	1	10/19/2012 8:55:06 PM
Iron	180	4.0	*	mg/L	100	10/23/2012 1:29:50 PM
Manganese	39	0.080	*	mg/L	20	10/23/2012 1:26:06 PM
Nickel	0.21	0.020	*	mg/L	1	10/19/2012 8:55:06 PM
Silver	ND	0.010		mg/L	1	10/19/2012 8:55:06 PM
Vanadium	0.18	0.10		mg/L	1	10/19/2012 8:55:06 PM
Zinc	0.28	0.020		mg/L	1	10/19/2012 8:55:06 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0050		mg/L	2.5	10/24/2012 4:58:22 PM
Arsenic	0.058	0.0050	*	mg/L	2.5	10/24/2012 4:58:22 PM
Lead	0.55	0.020	*	mg/L	10	10/25/2012 11:23:04 AM
Selenium	0.020	0.0050		mg/L	2.5	11/12/2012 7:34:36 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	0.00027	0.00020		mg/L	1	10/24/2012 7:32:00 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Acenaphthylene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Aniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Anthracene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Azobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benz(a)anthracene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Benzoic acid	ND	20		µg/L	1	10/16/2012 3:53:35 PM
Benzyl alcohol	ND	10		µg/L	1	10/16/2012 3:53:35 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW DUP

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-002

Matrix: AQUEOUS

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-chloroethoxy)methane	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Carbazole	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Chloroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Chlorophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Chrysene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Di-n-butyl phthalate	11	10		µg/L	1	10/16/2012 3:53:35 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Dibenzofuran	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Diethyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Dimethyl phthalate	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dimethylphenol	260	20		µg/L	2	10/20/2012 9:06:37 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Fluoranthene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Fluorene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Hexachloroethane	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Isophorone	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1-Methylnaphthalene	11	10		µg/L	1	10/16/2012 3:53:35 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Methylphenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
3+4-Methylphenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/16/2012 3:53:35 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW DUP

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-002

Matrix: AQUEOUS

Received Date: 10/12/2012 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	10/16/2012 3:53:35 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Naphthalene	12	10		µg/L	1	10/16/2012 3:53:35 PM
2-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
3-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Nitroaniline	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Nitrobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
4-Nitrophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Pentachlorophenol	ND	20		µg/L	1	10/16/2012 3:53:35 PM
Phenanthrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Phenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Pyrene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Pyridine	ND	10		µg/L	1	10/16/2012 3:53:35 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/16/2012 3:53:35 PM
Surr: 2,4,6-Tribromophenol	83.7	44.2-126		%REC	1	10/16/2012 3:53:35 PM
Surr: 2-Fluorobiphenyl	75.7	37-114		%REC	1	10/16/2012 3:53:35 PM
Surr: 2-Fluorophenol	58.4	23.4-98		%REC	1	10/16/2012 3:53:35 PM
Surr: 4-Terphenyl-d14	64.7	41.3-116		%REC	1	10/16/2012 3:53:35 PM
Surr: Nitrobenzene-d5	75.9	39.5-118		%REC	1	10/16/2012 3:53:35 PM
Surr: Phenol-d5	49.8	20.9-95.9		%REC	1	10/16/2012 3:53:35 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	19	5.0		µg/L	5	10/17/2012 10:22:32 PM
Toluene	19	5.0		µg/L	5	10/17/2012 10:22:32 PM
Ethylbenzene	8.8	5.0		µg/L	5	10/17/2012 10:22:32 PM
Methyl tert-butyl ether (MTBE)	70	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,4-Trimethylbenzene	14	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Naphthalene	21	10		µg/L	5	10/17/2012 10:22:32 PM
1-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 10:22:32 PM
2-Methylnaphthalene	ND	20		µg/L	5	10/17/2012 10:22:32 PM
Acetone	64	50		µg/L	5	10/17/2012 10:22:32 PM
Bromobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Bromodichloromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Bromoform	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Bromomethane	ND	15		µg/L	5	10/17/2012 10:22:32 PM
2-Butanone	ND	50		µg/L	5	10/17/2012 10:22:32 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW DUP

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-002

Matrix: AQUEOUS

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Carbon disulfide	ND	50		µg/L	5	10/17/2012 10:22:32 PM
Carbon Tetrachloride	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Chlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Chloroethane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Chloroform	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Chloromethane	ND	15		µg/L	5	10/17/2012 10:22:32 PM
2-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
4-Chlorotoluene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
cis-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Dibromochloromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Dibromomethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
2,2-Dichloropropane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
2-Hexanone	ND	50		µg/L	5	10/17/2012 10:22:32 PM
Isopropylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	10/17/2012 10:22:32 PM
Methylene Chloride	ND	15		µg/L	5	10/17/2012 10:22:32 PM
n-Butylbenzene	ND	15		µg/L	5	10/17/2012 10:22:32 PM
n-Propylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
sec-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Styrene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
tert-Butylbenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
trans-1,2-DCE	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-24 GW DUP

Project: SWMU NO.1

Collection Date: 10/10/2012 10:15:00 AM

Lab ID: 1210660-002

Matrix: AQUEOUS

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
1,1,2-Trichloroethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	10/17/2012 10:22:32 PM
Vinyl chloride	ND	5.0		µg/L	5	10/17/2012 10:22:32 PM
Xylenes, Total	36	7.5		µg/L	5	10/17/2012 10:22:32 PM
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	5	10/17/2012 10:22:32 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	5	10/17/2012 10:22:32 PM
Surr: Dibromofluoromethane	91.6	70-130		%REC	5	10/17/2012 10:22:32 PM
Surr: Toluene-d8	94.4	70-130		%REC	5	10/17/2012 10:22:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	1.9	0.25		mg/L	5	10/20/2012 6:05:32 PM
Surr: BFB	98.6	70-130		%REC	5	10/20/2012 6:05:32 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 **1210660**

Date Reported: **11/19/2012**

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210660-003

Matrix: TRIP BLANK

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:15:16 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:15:16 AM
Acetone	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Carbon disulfide	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 12:15:16 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210660-003

Matrix: TRIP BLANK

Received Date: 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 12:15:16 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 12:15:16 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 12:15:16 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 12:15:16 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 12:15:16 AM
Surr: 1,2-Dichloroethane-d4	89.9	70-130		%REC	1	10/18/2012 12:15:16 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	10/18/2012 12:15:16 AM
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	10/18/2012 12:15:16 AM
Surr: Toluene-d8	96.3	70-130		%REC	1	10/18/2012 12:15:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 7:02:36 PM
Surr: BFB	100	70-130		%REC	1	10/20/2012 7:02:36 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101012

Project: SWMU NO.1

Collection Date: 10/10/2012 6:45:00 PM

Lab ID: 1210660-004

Matrix: AQUEOUS

Received Date: 10/12/2012 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	10/12/2012 5:51:00 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/12/2012 5:51:00 PM
Surr: DNOP	112	79.5-166		%REC	1	10/12/2012 5:51:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	ND	0.10		mg/L	1	10/13/2012 8:22:19 PM
Chloride	ND	0.50		mg/L	1	10/13/2012 8:22:19 PM
Sulfate	ND	0.50		mg/L	1	10/13/2012 8:22:19 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Beryllium	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Chromium	ND	0.0060		mg/L	1	10/17/2012 9:10:57 PM
Cobalt	ND	0.0060		mg/L	1	10/17/2012 9:10:57 PM
Iron	ND	0.020		mg/L	1	10/18/2012 2:03:15 PM
Manganese	ND	0.0020		mg/L	1	10/17/2012 9:10:57 PM
Nickel	ND	0.010		mg/L	1	10/17/2012 9:10:57 PM
Silver	ND	0.0050		mg/L	1	10/17/2012 9:10:57 PM
Vanadium	ND	0.050		mg/L	1	10/17/2012 9:10:57 PM
Zinc	ND	0.010		mg/L	1	10/17/2012 9:10:57 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 6:54:33 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:33:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Acenaphthylene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Aniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Anthracene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Azobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benz(a)anthracene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Benzoic acid	ND	20		µg/L	1	10/16/2012 4:23:30 PM
Benzyl alcohol	ND	10		µg/L	1	10/16/2012 4:23:30 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101012

Project: SWMU NO.1

Collection Date: 10/10/2012 6:45:00 PM

Lab ID: 1210660-004

Matrix: AQUEOUS

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-chloroethoxy)methane	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Carbazole	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Chloroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Chlorophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Chrysene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Di-n-octyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Dibenzofuran	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Diethyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Dimethyl phthalate	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Fluoranthene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Fluorene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Hexachloroethane	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Isophorone	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Methylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
3+4-Methylphenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/16/2012 4:23:30 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101012

Project: SWMU NO.1

Collection Date: 10/10/2012 6:45:00 PM

Lab ID: 1210660-004

Matrix: AQUEOUS

Received Date: 10/12/2012 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	10/16/2012 4:23:30 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Naphthalene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Nitroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
3-Nitroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Nitroaniline	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Nitrobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2-Nitrophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
4-Nitrophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Pentachlorophenol	ND	20		µg/L	1	10/16/2012 4:23:30 PM
Phenanthrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Phenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Pyrene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Pyridine	ND	10		µg/L	1	10/16/2012 4:23:30 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/16/2012 4:23:30 PM
Surr: 2,4,6-Tribromophenol	83.9	44.2-126		%REC	1	10/16/2012 4:23:30 PM
Surr: 2-Fluorobiphenyl	67.2	37-114		%REC	1	10/16/2012 4:23:30 PM
Surr: 2-Fluorophenol	53.6	23.4-98		%REC	1	10/16/2012 4:23:30 PM
Surr: 4-Terphenyl-d14	73.0	41.3-116		%REC	1	10/16/2012 4:23:30 PM
Surr: Nitrobenzene-d5	76.8	39.5-118		%REC	1	10/16/2012 4:23:30 PM
Surr: Phenol-d5	44.7	20.9-95.9		%REC	1	10/16/2012 4:23:30 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:43:20 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 12:43:20 AM
Acetone	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 12:43:20 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101012

Project: SWMU NO.1

Collection Date: 10/10/2012 6:45:00 PM

Lab ID: 1210660-004

Matrix: AQUEOUS

Received Date: 10/12/2012 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	10/18/2012 12:43:20 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 12:43:20 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 12:43:20 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 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 1210660

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101012

Project: SWMU NO.1

Collection Date: 10/10/2012 6:45:00 PM

Lab ID: 1210660-004

Matrix: AQUEOUS

Received Date: 10/12/2012 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	10/18/2012 12:43:20 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 12:43:20 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 12:43:20 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 12:43:20 AM
Surr: 1,2-Dichloroethane-d4	91.8	70-130		%REC	1	10/18/2012 12:43:20 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	1	10/18/2012 12:43:20 AM
Surr: Dibromofluoromethane	92.4	70-130		%REC	1	10/18/2012 12:43:20 AM
Surr: Toluene-d8	95.0	70-130		%REC	1	10/18/2012 12:43:20 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 7:30:51 PM
Surr: BFB	95.6	70-130		%REC	1	10/20/2012 7:30:51 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

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 #: 121016063
Project Name: 1210660

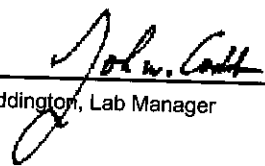
Analytical Results Report

Sample Number	121016063-001	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:00 PM		
Client Sample ID	1210660-001F / SWMU 1-24 GW			Sampling Time	10:15 AM		
Matrix	Water	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0587	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number	121016063-002	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:00 PM		
Client Sample ID	1210660-002F / SWMU 1-24 GW DUP			Sampling Time	10:15 AM		
Matrix	Water	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0806	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number	121016063-003	Sampling Date	10/10/2012	Date/Time Received	10/16/2012 1:00 PM		
Client Sample ID	1210660-004F / EB101012			Sampling Time	6:45 PM		
Matrix	Water	Sample Location					
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/24/2012	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, November 02, 2012

Page 1 of 1

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	R6311		RunNo:	6311			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	181710	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:	R6311		RunNo:	6311			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	181711	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	101	85	115			
Beryllium	0.51	0.0020	0.5000	0	103	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	98.9	85	115			
Cobalt	0.49	0.0060	0.5000	0	97.1	85	115			
Manganese	0.49	0.0020	0.5000	0	98.1	85	115			
Nickel	0.48	0.010	0.5000	0	95.9	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Vanadium	0.52	0.050	0.5000	0	104	85	115			
Zinc	0.49	0.010	0.5000	0	98.4	85	115			

Sample ID	1210572-018AMS		SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	R6311		RunNo:	6311			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	181754	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	101	70	130			
Chromium	0.47	0.0060	0.5000	0	95.0	70	130			
Nickel	0.45	0.010	0.5000	0.001290	90.7	70	130			
Zinc	0.46	0.010	0.5000	0	92.7	70	130			

Sample ID	1210572-018AMSD		SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	R6311		RunNo:	6311			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	181755	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210572-018AMSD		SampType: MSD		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R6311		RunNo: 6311					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181755		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	99.7	70	130	1.02	20	
Chromium	0.47	0.0060	0.5000	0	93.9	70	130	1.11	20	
Nickel	0.46	0.010	0.5000	0.001290	92.0	70	130	1.48	20	
Zinc	0.46	0.010	0.5000	0	91.7	70	130	1.09	20	

Sample ID	MB	SampType:	MBLK		TestCode:	EPA Method 200.7: Metals				
Client ID:	PBW	Batch ID:	R6342		RunNo:	6342				
Prep Date:		Analysis Date:	10/18/2012		SeqNo:	182483		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: R6342		RunNo: 6342					
Prep Date:			Analysis Date: 10/18/2012		SeqNo: 182484		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	98.1	85	115			

Sample ID	1210513-001AMS		SampType: MS		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: R6342		RunNo: 6342					
Prep Date:			Analysis Date: 10/18/2012		SeqNo: 182578		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	1210513-001AMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC			Batch ID:	R6342		RunNo:	6342			
Prep Date:				Analysis Date:	10/18/2012		SeqNo:	182579		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	98.8	70	130	1.41	20		

Sample ID	MB-4388		SampType: MBLK		TestCode: EPA Method 200.7: Metals					
Client ID:	PBW		Batch ID: 4388		RunNo: 6377					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183397		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								

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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4388		SampType:	MBLK		TestCode:	EPA Method 200.7: Metals			
Client ID:	PBW		Batch ID:	4388		RunNo:	6377			
Prep Date:	10/18/2012		Analysis Date:	10/19/2012		SeqNo:	183397		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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-4388		SampType:	LCS		TestCode:	EPA Method 200.7: Metals			
Client ID:	LCSW		Batch ID:	4388		RunNo:	6377			
Prep Date:	10/18/2012		Analysis Date:	10/19/2012		SeqNo:	183398		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	95.9	85	115			
Beryllium	0.52	0.0020	0.5000	0	104	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.49	0.0060	0.5000	0	97.1	85	115			
Cobalt	0.47	0.0060	0.5000	0	93.3	85	115			
Iron	0.47	0.020	0.5000	0	94.4	85	115			
Manganese	0.47	0.0020	0.5000	0	93.4	85	115			
Nickel	0.46	0.010	0.5000	0	92.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Vanadium	0.51	0.050	0.5000	0	102	85	115			
Zinc	0.48	0.010	0.5000	0	95.3	85	115			

Sample ID	1210692-027DMS		SampType:	MS		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC		Batch ID:	4388		RunNo:	6377			
Prep Date:	10/18/2012		Analysis Date:	10/19/2012		SeqNo:	183451		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.45	0.0020	0.5000	0.001070	90.6	70	130			
Beryllium	0.49	0.0020	0.5000	0	97.3	70	130			
Cadmium	0.48	0.0020	0.5000	0	95.6	70	130			
Chromium	0.46	0.0060	0.5000	0	91.5	70	130			
Cobalt	0.43	0.0060	0.5000	0	86.4	70	130			
Manganese	0.45	0.0020	0.5000	0.001780	89.2	70	130			
Nickel	0.42	0.010	0.5000	0.001690	83.9	70	130			
Silver	0.095	0.0050	0.1000	0	94.9	70	130			
Vanadium	0.49	0.050	0.5000	0	98.2	70	130			
Zinc	0.42	0.010	0.5000	0	83.3	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210692-027DMSD	SampType: MSD			TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC	Batch ID: 4388			RunNo: 6377					
Prep Date:	10/18/2012	Analysis Date: 10/19/2012			SeqNo: 183452		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.46	0.0020	0.5000	0.001070	91.1	70	130	0.538	20	
Beryllium	0.49	0.0020	0.5000	0	97.1	70	130	0.126	20	
Cadmium	0.48	0.0020	0.5000	0	95.8	70	130	0.190	20	
Chromium	0.46	0.0060	0.5000	0	91.8	70	130	0.347	20	
Cobalt	0.43	0.0060	0.5000	0	86.8	70	130	0.490	20	
Manganese	0.45	0.0020	0.5000	0.001780	89.7	70	130	0.617	20	
Nickel	0.42	0.010	0.5000	0.001690	84.4	70	130	0.521	20	
Silver	0.098	0.0050	0.1000	0	98.2	70	130	3.36	20	
Vanadium	0.49	0.050	0.5000	0	98.2	70	130	0.0244	20	
Zinc	0.42	0.010	0.5000	0	83.9	70	130	0.765	20	

Sample ID	1210692-027DMS		SampType: MS		TestCode: EPA Method 200.7: Metals					
Client ID:	BatchQC		Batch ID: 4388		RunNo: 6431					
Prep Date:	10/18/2012		Analysis Date: 10/23/2012		SeqNo: 184811		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.60	0.020	0.5000	0.1311	92.9	70	130			

Sample ID	1210692-027DMSD			SampType:	MSD		TestCode:	EPA Method 200.7: Metals			
Client ID:	BatchQC			Batch ID:	4388		RunNo:	6431			
Prep Date:	10/18/2012			Analysis Date:	10/23/2012		SeqNo:	184812		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Iron	0.60	0.020	0.5000	0.1311	94.6	70	130	1.40	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4388		SampType: MBLK		TestCode: EPA 200.8: Metals					
Client ID:	PBW		Batch ID: 4388		RunNo: 6368					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183111		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	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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								

Sample ID	MB-4738		SampType: MBLK		TestCode: EPA 200.8: Metals					
Client ID:	PBW		Batch ID: 4738		RunNo: 6848					
Prep Date:	11/8/2012		Analysis Date: 11/12/2012		SeqNo: 198392		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	0.0025								

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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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
Mercury	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
- 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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBW		Batch ID: R6232		RunNo: 6232					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 179591		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: R6232		RunNo: 6232					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 179592		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	95.5	90	110			
Chloride	4.9	0.50	5.000	0	97.6	90	110			
Sulfate	9.8	0.50	10.00	0	97.9	90	110			

Sample ID	1210676-008AMSx1		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6232		RunNo: 6232					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 179594		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.9	1.0	5.000	0.3890	90.3	76.6	110			

Sample ID	1210676-008AMSDx		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6232		RunNo: 6232					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 179595		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	4.9	1.0	5.000	0.3890	90.1	76.6	110	0.204	20	

Sample ID	1210676-011AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6232		RunNo: 6232					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 179603		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	1.108	33.5	76.6	110			S

Sample ID	1210676-011AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6232		RunNo: 6232					
Prep Date:			Analysis Date: 10/13/2012		SeqNo: 179604		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.3	0.10	0.5000	1.108	34.3	76.6	110	0.321	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
- 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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R6279			RunNo: 6279						
Prep Date:		Analysis Date: 10/16/2012			SeqNo: 180866		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: R6279			RunNo: 6279						
Prep Date:		Analysis Date: 10/16/2012			SeqNo: 180867		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.7	0.50	5.000	0	94.5	90	110			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID:	PBW	Batch ID: R6279			RunNo: 6279						
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 180926		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: R6279			RunNo: 6279						
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 180927		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		4.8	0.50	5.000	0	95.0	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4284		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW		Batch ID: 4284		RunNo: 6179					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 178640		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		110	79.5	166			

Sample ID	LCS-4284		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 4284		RunNo: 6179					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 178642		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	89.4	74	157			
Surr: DNOP	0.46		0.5000		92.8	79.5	166			

Sample ID	LCSD-4284		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 4284		RunNo: 6179					
Prep Date:	10/12/2012		Analysis Date: 10/12/2012		SeqNo: 178643		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.2	1.0	5.000	0	83.9	74	157	6.29	23	
Surr: DNOP	0.51		0.5000		103	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb-b	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6340			RunNo: 6340					
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 182455		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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb-b	SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID: R6340		RunNo: 6340						
Prep Date:		Analysis Date: 10/17/2012		SeqNo: 182455		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	8.5		10.00		84.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	8.8		10.00		87.8	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID	100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID: R6340		RunNo: 6340						
Prep Date:		Analysis Date: 10/17/2012		SeqNo: 182457		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	21	1.0	20.00	0	105	80	120			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	94.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	100ng lcs		SampType:	LCS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	LCSW		Batch ID:	R6340		RunNo:	6340			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	182457	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.6		10.00		95.7	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	70	130			

Sample ID	1210660-001ams		SampType:	MS		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	SWMU 1-24 GW		Batch ID:	R6340		RunNo:	6340			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	182459	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	130	5.0	100.0	19.53	115	66.8	128			
Toluene	120	5.0	100.0	18.25	100	70	130			
Chlorobenzene	99	5.0	100.0	0	98.8	70	130			
1,1-Dichloroethene	110	5.0	100.0	0	109	70	130			
Trichloroethene (TCE)	94	5.0	100.0	0	94.0	70	130			
Surr: 1,2-Dichloroethane-d4	45		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	47		50.00		94.9	70	130			
Surr: Dibromofluoromethane	47		50.00		94.8	70	130			
Surr: Toluene-d8	47		50.00		94.4	70	130			

Sample ID	1210660-001amsd		SampType:	MSD		TestCode:	EPA Method 8260B: VOLATILES			
Client ID:	SWMU 1-24 GW		Batch ID:	R6340		RunNo:	6340			
Prep Date:			Analysis Date:	10/17/2012		SeqNo:	182460	Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	130	5.0	100.0	19.53	107	66.8	128	6.17	16.7	
Toluene	110	5.0	100.0	18.25	93.5	70	130	5.64	18.7	
Chlorobenzene	98	5.0	100.0	0	98.5	70	130	0.270	19.5	
1,1-Dichloroethene	100	5.0	100.0	0	104	70	130	4.23	16.7	
Trichloroethene (TCE)	92	5.0	100.0	0	91.9	70	130	2.26	17.5	
Surr: 1,2-Dichloroethane-d4	46		50.00		92.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	48		50.00		96.8	70	130	0	0	
Surr: Dibromofluoromethane	47		50.00		94.3	70	130	0	0	
Surr: Toluene-d8	47		50.00		94.8	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4322		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 4322		RunNo: 6287					
Prep Date:	10/16/2012		Analysis Date: 10/16/2012		SeqNo: 181174		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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4322	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	4322	RunNo:	6287					
Prep Date:	10/16/2012	Analysis Date:	10/16/2012	SeqNo:	181174	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	140		200.0		71.8	44.2	126			
Surr: 2-Fluorobiphenyl	86		100.0		86.2	37	114			
Surr: 2-Fluorophenol	110		200.0		56.3	23.4	98			
Surr: 4-Terphenyl-d14	76		100.0		75.8	41.3	116			
Surr: Nitrobenzene-d5	98		100.0		97.6	39.5	118			
Surr: Phenol-d5	100		200.0		52.2	20.9	95.9			

Qualifiers:

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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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4322	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 4322			RunNo: 6287					
Prep Date:	10/16/2012	Analysis Date: 10/16/2012			SeqNo: 181175		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	77	10	100.0	0	77.2	38.2	99.4			
4-Chloro-3-methylphenol	170	10	200.0	0	85.8	35.5	108			
2-Chlorophenol	150	10	200.0	0	74.2	29.8	106			
1,4-Dichlorobenzene	57	10	100.0	0	57.1	32.6	91.5			
2,4-Dinitrotoluene	98	10	100.0	0	98.4	44.7	112			
N-Nitrosodi-n-propylamine	89	10	100.0	0	88.6	38.5	105			
4-Nitrophenol	75	10	200.0	0	37.6	11.6	73.1			
Pentachlorophenol	86	20	200.0	0	42.8	20.2	93			
Phenol	92	10	200.0	0	46.2	23	66.1			
Pyrene	76	10	100.0	0	76.1	40.1	101			
1,2,4-Trichlorobenzene	66	10	100.0	0	65.6	37.7	99.1			
Surr: 2,4,6-Tribromophenol	170		200.0		85.9	44.2	126			
Surr: 2-Fluorobiphenyl	79		100.0		78.9	37	114			
Surr: 2-Fluorophenol	120		200.0		58.0	23.4	98			
Surr: 4-Terphenyl-d14	81		100.0		80.7	41.3	116			
Surr: Nitrobenzene-d5	85		100.0		84.6	39.5	118			
Surr: Phenol-d5	100		200.0		52.3	20.9	95.9			

Sample ID	Icsd-4322		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles						
Client ID:	LCSS02		Batch ID: 4322		RunNo: 6287						
Prep Date:	10/16/2012		Analysis Date: 10/16/2012		SeqNo: 181176		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Acenaphthene	78	10	100.0	0	77.9	38.2	99.4	0.980	20		
4-Chloro-3-methylphenol	180	10	200.0	0	88.1	35.5	108	2.61	20		
2-Chlorophenol	150	10	200.0	0	76.6	29.8	106	3.08	20		
1,4-Dichlorobenzene	60	10	100.0	0	59.6	32.6	91.5	4.28	20		
2,4-Dinitrotoluene	110	10	100.0	0	106	44.7	112	7.64	20		
N-Nitrosodi-n-propylamine	89	10	100.0	0	88.7	38.5	105	0.113	20		
4-Nitrophenol	100	10	200.0	0	50.4	11.6	73.1	28.9	20	R	
Pentachlorophenol	110	20	200.0	0	55.0	20.2	93	25.2	20	R	
Phenol	97	10	200.0	0	48.6	23	66.1	5.21	20		
Pyrene	81	10	100.0	0	81.0	40.1	101	6.19	20		
1,2,4-Trichlorobenzene	66	10	100.0	0	66.3	37.7	99.1	0.970	20		
Surr: 2,4,6-Tribromophenol	190		200.0		93.8	44.2	126	0	0		
Surr: 2-Fluorobiphenyl	82		100.0		81.6	37	114	0	0		
Surr: 2-Fluorophenol	120		200.0		60.8	23.4	98	0	0		
Surr: 4-Terphenyl-d14	78		100.0		78.5	41.3	116	0	0		
Surr: Nitrobenzene-d5	86		100.0		85.7	39.5	118	0	0		
Surr: Phenol-d5	110		200.0		53.9	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#: 1210660

19-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID b6	SampType: MBLK		TestCode: 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: 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: EPA Method 8015B: Gasoline Range							
Client ID: SWMU 1-24 GW	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: EPA Method 8015B: Gasoline Range							
Client ID: SWMU 1-24 GW	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	

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: 1210660

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 9:45:55 AM

Michelle Garcia

Reviewed By: *MG* *AS*

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° 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: 3 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: _____

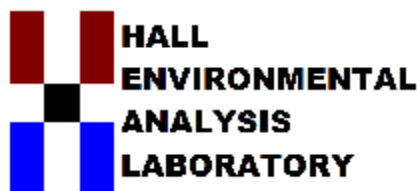
18. Additional remarks:

19. Cooler Information

Cooler No	Temp °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
+ Anions



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

November 19, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210692

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 29 sample(s) on 10/13/2012 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-001

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 2:24:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 2:24:10 PM
Surr: DNOP	92.3	77.6-140		%REC	1	10/16/2012 2:24:10 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.038	0.033		mg/kg	1	10/23/2012 4:41:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Barium	740	2.0		mg/Kg	20	11/2/2012 7:24:51 AM
Beryllium	0.71	0.30		mg/Kg	2	10/25/2012 9:11:00 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:11:00 PM
Chromium	19	0.60		mg/Kg	2	10/25/2012 9:11:00 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 9:11:00 PM
Iron	15000	500		mg/Kg	500	11/2/2012 7:27:16 AM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 9:11:00 PM
Manganese	650	2.0		mg/Kg	20	11/2/2012 7:24:51 AM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 9:11:00 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:11:00 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
Zinc	22	5.0		mg/Kg	2	10/25/2012 9:11:00 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-001

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 7:10:04 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 7:10:04 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 7:10:04 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-001

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 7:10:04 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:10:04 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 7:10:04 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:10:04 AM
Surr: 2,4,6-Tribromophenol	54.6	21.3-145		%REC	1	10/21/2012 7:10:04 AM
Surr: 2-Fluorobiphenyl	62.8	20-131		%REC	1	10/21/2012 7:10:04 AM
Surr: 2-Fluorophenol	50.4	11.9-130		%REC	1	10/21/2012 7:10:04 AM
Surr: 4-Terphenyl-d14	67.4	25.1-149		%REC	1	10/21/2012 7:10:04 AM
Surr: Nitrobenzene-d5	65.1	25.6-137		%REC	1	10/21/2012 7:10:04 AM
Surr: Phenol-d5	54.6	20.3-132		%REC	1	10/21/2012 7:10:04 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00137	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Toluene	0.00197	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Ethylbenzene	0.0448	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Xylenes, Total	0.279	0.00162	E	mg/Kg	1	10/15/2012 1:49:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,4-Trimethylbenzene	0.00140	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3,5-Trimethylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichloroethane (EDC)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dibromoethane (EDB)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Naphthalene	ND	0.00162		mg/Kg	1	10/15/2012 1:49:48 PM
1-Methylnaphthalene	ND	0.00324		mg/Kg	1	10/15/2012 1:49:48 PM
2-Methylnaphthalene	ND	0.00324		mg/Kg	1	10/15/2012 1:49:48 PM
Acetone	3.31	0.00810	E	mg/Kg	1	10/15/2012 1:49:48 PM
Bromobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Bromodichloromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Bromoform	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Bromomethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2-Butanone	0.0220	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Carbon tetrachloride	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chloroform	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Chloromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2-Chlorotoluene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-001

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Chlorotoluene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
cis-1,2-DCE	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
cis-1,3-Dichloropropene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dibromo-3-chloropropane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Dibromochloromethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Dibromomethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichlorobenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3-Dichlorobenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,4-Dichlorobenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Dichlorodifluoromethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloroethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloroethene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichloropropane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3-Dichloropropane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
2,2-Dichloropropane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloropropene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Hexachlorobutadiene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Isopropylbenzene	0.00210	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Isopropyltoluene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Methylene chloride	ND	0.00243		mg/Kg	1	10/15/2012 1:49:48 PM
n-Butylbenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
2-Hexanone	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
n-Propylbenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
sec-Butylbenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Styrene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Methyl-2-pentanone	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
tert-Butylbenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,1,2-Tetrachloroethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,2,2-Tetrachloroethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Tetrachloroethene (PCE)	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
trans-1,2-DCE	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
trans-1,3-Dichloropropene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,3-Trichlorobenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,4-Trichlorobenzene	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,1-Trichloroethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,2-Trichloroethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Trichloroethene (TCE)	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Trichlorofluoromethane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,3-Trichloropropane	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Vinyl chloride	ND	0.00810		mg/Kg	1	10/15/2012 1:49:48 PM
Surr: 1,2-Dichloroethane-d4	88.1	70-130		%REC	1	10/15/2012 1:49:48 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-001

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	10/15/2012 1:49:48 PM
Surr: Dibromofluoromethane	100	70-130		%REC	1	10/15/2012 1:49:48 PM
Surr: Toluene-d8	87.1	70-130		%REC	1	10/15/2012 1:49:48 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 2:47:27 PM
Surr: BFB	88.8	70-130		%REC	1	10/21/2012 2:47:27 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-002

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 2:49:37 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 2:49:37 PM
Surr: DNOP	93.8	77.6-140		%REC	1	10/16/2012 2:49:37 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.037	0.033		mg/kg	1	10/23/2012 4:42:56 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	11/2/2012 7:30:09 AM
Arsenic	ND	13		mg/Kg	5	11/2/2012 7:30:09 AM
Barium	840	2.0		mg/Kg	20	11/2/2012 9:49:13 AM
Beryllium	0.94	0.75		mg/Kg	5	11/2/2012 7:30:09 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 7:30:09 AM
Chromium	23	1.5		mg/Kg	5	11/2/2012 7:30:09 AM
Cobalt	5.4	1.5		mg/Kg	5	11/2/2012 7:30:09 AM
Iron	19000	500		mg/Kg	500	11/2/2012 9:51:40 AM
Lead	3.4	1.3		mg/Kg	5	11/2/2012 7:30:09 AM
Manganese	680	2.0		mg/Kg	20	11/2/2012 9:49:13 AM
Nickel	8.5	2.5		mg/Kg	5	11/2/2012 7:30:09 AM
Selenium	ND	13		mg/Kg	5	11/2/2012 7:30:09 AM
Silver	ND	1.3		mg/Kg	5	11/2/2012 7:30:09 AM
Vanadium	32	13		mg/Kg	5	11/2/2012 7:30:09 AM
Zinc	28	13		mg/Kg	5	11/2/2012 7:30:09 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-002

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 7:38:49 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 7:38:49 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 7:38:49 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-002

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 7:38:49 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 7:38:49 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 7:38:49 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 7:38:49 AM
Surr: 2,4,6-Tribromophenol	47.1	21.3-145		%REC	1	10/21/2012 7:38:49 AM
Surr: 2-Fluorobiphenyl	54.9	20-131		%REC	1	10/21/2012 7:38:49 AM
Surr: 2-Fluorophenol	42.7	11.9-130		%REC	1	10/21/2012 7:38:49 AM
Surr: 4-Terphenyl-d14	59.1	25.1-149		%REC	1	10/21/2012 7:38:49 AM
Surr: Nitrobenzene-d5	50.0	25.6-137		%REC	1	10/21/2012 7:38:49 AM
Surr: Phenol-d5	44.3	20.3-132		%REC	1	10/21/2012 7:38:49 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00188	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Toluene	0.00386	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Ethylbenzene	0.0622	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Xylenes, Total	0.379	0.00246	E	mg/Kg	1	10/15/2012 2:20:41 PM
Methyl tert-butyl ether (MTBE)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,4-Trimethylbenzene	0.00184	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,3,5-Trimethylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dichloroethane (EDC)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dibromoethane (EDB)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Naphthalene	ND	0.00246		mg/Kg	1	10/15/2012 2:20:41 PM
1-Methylnaphthalene	ND	0.00491		mg/Kg	1	10/15/2012 2:20:41 PM
2-Methylnaphthalene	ND	0.00491		mg/Kg	1	10/15/2012 2:20:41 PM
Acetone	3.98	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromodichloromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromoform	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Bromomethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2-Butanone	0.0314	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
Carbon tetrachloride	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chloroform	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Chloromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2-Chlorotoluene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-002

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
4-Chlorotoluene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
cis-1,2-DCE	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
cis-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dibromo-3-chloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Dibromochloromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Dibromomethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,3-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,4-Dichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Dichlorodifluoromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1-Dichloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1-Dichloroethene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,3-Dichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2,2-Dichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1-Dichloropropene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Hexachlorobutadiene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Isopropylbenzene	0.00282	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
4-Isopropyltoluene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Methylene chloride	ND	0.00368		mg/Kg	1	10/15/2012 2:20:41 PM
n-Butylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
2-Hexanone	ND	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
n-Propylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
sec-Butylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Styrene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
4-Methyl-2-pentanone	ND	0.0123		mg/Kg	1	10/15/2012 2:20:41 PM
tert-Butylbenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,1,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,2,2-Tetrachloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Tetrachloroethene (PCE)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
trans-1,2-DCE	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
trans-1,3-Dichloropropene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,3-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,4-Trichlorobenzene	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,1-Trichloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,1,2-Trichloroethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Trichloroethene (TCE)	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Trichlorofluoromethane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
1,2,3-Trichloropropane	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Vinyl chloride	ND	0.00123		mg/Kg	1	10/15/2012 2:20:41 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/15/2012 2:20:41 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/11/2012 12:20:00 PM

Lab ID: 1210692-002

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	1	10/15/2012 2:20:41 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/15/2012 2:20:41 PM
Surr: Toluene-d8	91.2	70-130		%REC	1	10/15/2012 2:20:41 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 3:44:56 PM
Surr: BFB	95.6	70-130		%REC	1	10/21/2012 3:44:56 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:30:00 PM

Lab ID: 1210692-003

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/16/2012 9:09:09 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/16/2012 9:09:09 AM
Surr: DNOP	92.1	77.6-140		%REC	1	10/16/2012 9:09:09 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:44:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	11/2/2012 7:32:33 AM
Arsenic	ND	13		mg/Kg	5	11/2/2012 7:32:33 AM
Barium	1000	5.0		mg/Kg	50	11/2/2012 10:25:25 AM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 7:32:33 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 7:32:33 AM
Chromium	11	1.5		mg/Kg	5	11/2/2012 7:32:33 AM
Cobalt	4.7	1.5		mg/Kg	5	11/2/2012 7:32:33 AM
Iron	16000	500		mg/Kg	500	11/2/2012 9:56:46 AM
Lead	3.9	1.3		mg/Kg	5	11/2/2012 7:32:33 AM
Manganese	950	2.0		mg/Kg	20	11/2/2012 9:54:19 AM
Nickel	7.3	2.5		mg/Kg	5	11/2/2012 7:32:33 AM
Selenium	ND	13		mg/Kg	5	11/2/2012 7:32:33 AM
Silver	ND	1.3		mg/Kg	5	11/2/2012 7:32:33 AM
Vanadium	29	13		mg/Kg	5	11/2/2012 7:32:33 AM
Zinc	17	13		mg/Kg	5	11/2/2012 7:32:33 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:30:00 PM

Lab ID: 1210692-003

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 12:31:33 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 12:31:33 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 12:31:33 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:30:00 PM

Lab ID: 1210692-003

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 12:31:33 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:31:33 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 12:31:33 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:31:33 AM
Surr: 2,4,6-Tribromophenol	69.5	21.3-145		%REC	1	10/21/2012 12:31:33 AM
Surr: 2-Fluorobiphenyl	82.1	20-131		%REC	1	10/21/2012 12:31:33 AM
Surr: 2-Fluorophenol	60.1	11.9-130		%REC	1	10/21/2012 12:31:33 AM
Surr: 4-Terphenyl-d14	71.6	25.1-149		%REC	1	10/21/2012 12:31:33 AM
Surr: Nitrobenzene-d5	75.8	25.6-137		%REC	1	10/21/2012 12:31:33 AM
Surr: Phenol-d5	68.9	20.3-132		%REC	1	10/21/2012 12:31:33 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00151	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Toluene	0.00105	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Ethylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Xylenes, Total	ND	0.00180		mg/Kg	1	10/15/2012 2:51:33 PM
Methyl tert-butyl ether (MTBE)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,4-Trimethylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,3,5-Trimethylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dichloroethane (EDC)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dibromoethane (EDB)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Naphthalene	ND	0.00180		mg/Kg	1	10/15/2012 2:51:33 PM
1-Methylnaphthalene	ND	0.00360		mg/Kg	1	10/15/2012 2:51:33 PM
2-Methylnaphthalene	ND	0.00360		mg/Kg	1	10/15/2012 2:51:33 PM
Acetone	0.119	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromodichloromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromoform	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Bromomethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2-Butanone	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
Carbon tetrachloride	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chloroform	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Chloromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2-Chlorotoluene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:30:00 PM

Lab ID: 1210692-003

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
4-Chlorotoluene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
cis-1,2-DCE	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
cis-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dibromo-3-chloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Dibromochloromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Dibromomethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,3-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,4-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Dichlorodifluoromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1-Dichloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1-Dichloroethene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,3-Dichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1-Dichloropropene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Hexachlorobutadiene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Isopropylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
4-Isopropyltoluene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Methylene chloride	ND	0.00270		mg/Kg	1	10/15/2012 2:51:33 PM
n-Butylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
2-Hexanone	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
n-Propylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
sec-Butylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Styrene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
4-Methyl-2-pentanone	ND	0.00899		mg/Kg	1	10/15/2012 2:51:33 PM
tert-Butylbenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,1,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,2,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Tetrachloroethene (PCE)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
trans-1,2-DCE	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
trans-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,3-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,4-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,1-Trichloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,1,2-Trichloroethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Trichloroethene (TCE)	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Trichlorofluoromethane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
1,2,3-Trichloropropane	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Vinyl chloride	ND	0.000899		mg/Kg	1	10/15/2012 2:51:33 PM
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%REC	1	10/15/2012 2:51:33 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:30:00 PM

Lab ID: 1210692-003

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	10/15/2012 2:51:33 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/15/2012 2:51:33 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/15/2012 2:51:33 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 4:13:44 PM
Surr: BFB	88.8	70-130		%REC	1	10/21/2012 4:13:44 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (4-6')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:45:00 PM

Lab ID: 1210692-004

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 10:45:38 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 10:45:38 AM
Surr: DNOP	91.9	77.6-140		%REC	1	10/16/2012 10:45:38 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:46:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Barium	190	1.0		mg/Kg	10	11/2/2012 7:35:01 AM
Beryllium	0.97	0.30		mg/Kg	2	10/25/2012 9:36:54 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:36:54 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 9:36:54 PM
Cobalt	4.9	0.60		mg/Kg	2	10/25/2012 9:36:54 PM
Iron	17000	500		mg/Kg	500	11/2/2012 7:37:27 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 9:36:54 PM
Manganese	330	1.0		mg/Kg	10	11/2/2012 7:35:01 AM
Nickel	8.6	1.0		mg/Kg	2	10/25/2012 9:36:54 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:36:54 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
Zinc	16	5.0		mg/Kg	2	10/25/2012 9:36:54 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (4-6')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:45:00 PM

Lab ID: 1210692-004

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 1:00:43 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 1:00:43 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 1:00:43 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 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
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (4-6')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:45:00 PM

Lab ID: 1210692-004

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 1:00:43 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:00:43 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 1:00:43 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:00:43 AM
Surr: 2,4,6-Tribromophenol	77.8	21.3-145		%REC	1	10/21/2012 1:00:43 AM
Surr: 2-Fluorobiphenyl	83.8	20-131		%REC	1	10/21/2012 1:00:43 AM
Surr: 2-Fluorophenol	74.4	11.9-130		%REC	1	10/21/2012 1:00:43 AM
Surr: 4-Terphenyl-d14	74.4	25.1-149		%REC	1	10/21/2012 1:00:43 AM
Surr: Nitrobenzene-d5	90.8	25.6-137		%REC	1	10/21/2012 1:00:43 AM
Surr: Phenol-d5	85.2	20.3-132		%REC	1	10/21/2012 1:00:43 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00321	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Toluene	0.00205	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Ethylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Xylenes, Total	ND	0.00150		mg/Kg	1	10/15/2012 3:22:21 PM
Methyl tert-butyl ether (MTBE)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,4-Trimethylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,3,5-Trimethylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dichloroethane (EDC)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dibromoethane (EDB)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Naphthalene	ND	0.00150		mg/Kg	1	10/15/2012 3:22:21 PM
1-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/15/2012 3:22:21 PM
2-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/15/2012 3:22:21 PM
Acetone	0.0242	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromodichloromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromoform	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Bromomethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2-Butanone	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
Carbon tetrachloride	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chloroform	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Chloromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2-Chlorotoluene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (4-6')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:45:00 PM

Lab ID: 1210692-004

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
4-Chlorotoluene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
cis-1,2-DCE	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
cis-1,3-Dichloropropene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dibromo-3-chloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Dibromochloromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Dibromomethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,3-Dichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,4-Dichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Dichlorodifluoromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1-Dichloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1-Dichloroethene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2-Dichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,3-Dichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2,2-Dichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1-Dichloropropene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Hexachlorobutadiene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Isopropylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
4-Isopropyltoluene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Methylene chloride	ND	0.00224		mg/Kg	1	10/15/2012 3:22:21 PM
n-Butylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
2-Hexanone	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
n-Propylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
sec-Butylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Styrene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
4-Methyl-2-pentanone	ND	0.00748		mg/Kg	1	10/15/2012 3:22:21 PM
tert-Butylbenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,1,2-Tetrachloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,2,2-Tetrachloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Tetrachloroethene (PCE)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
trans-1,2-DCE	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
trans-1,3-Dichloropropene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,3-Trichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,4-Trichlorobenzene	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,1-Trichloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,1,2-Trichloroethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Trichloroethene (TCE)	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Trichlorofluoromethane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
1,2,3-Trichloropropane	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Vinyl chloride	ND	0.000748		mg/Kg	1	10/15/2012 3:22:21 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	10/15/2012 3:22:21 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (4-6')

Project: SWMU NO.1

Collection Date: 10/11/2012 12:45:00 PM

Lab ID: 1210692-004

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	88.1	70-130		%REC	1	10/15/2012 3:22:21 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/15/2012 3:22:21 PM
Surr: Toluene-d8	87.0	70-130		%REC	1	10/15/2012 3:22:21 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 4:42:26 PM
Surr: BFB	90.3	70-130		%REC	1	10/21/2012 4:42:26 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (10-12')

Project: SWMU NO.1

Collection Date: 10/11/2012 1:00:00 PM

Lab ID: 1210692-005

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 11:07:11 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 11:07:11 AM
Surr: DNOP	91.5	77.6-140		%REC	1	10/16/2012 11:07:11 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:48:16 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Barium	1100	5.0		mg/Kg	50	11/2/2012 9:59:37 AM
Beryllium	1.0	0.30		mg/Kg	2	10/25/2012 9:45:32 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:45:32 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 9:45:32 PM
Cobalt	5.8	0.60		mg/Kg	2	10/25/2012 9:45:32 PM
Iron	18000	500		mg/Kg	500	11/2/2012 7:42:48 AM
Lead	1.5	0.50		mg/Kg	2	10/25/2012 9:45:32 PM
Manganese	540	2.0		mg/Kg	20	11/2/2012 7:40:21 AM
Nickel	12	1.0		mg/Kg	2	10/25/2012 9:45:32 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:45:32 PM
Vanadium	21	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
Zinc	24	5.0		mg/Kg	2	10/25/2012 9:45:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (10-12')

Project: SWMU NO.1

Collection Date: 10/11/2012 1:00:00 PM

Lab ID: 1210692-005

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 1:29:49 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 1:29:49 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 1:29:49 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (10-12')

Project: SWMU NO.1

Collection Date: 10/11/2012 1:00:00 PM

Lab ID: 1210692-005

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 1:29:49 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:29:49 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 1:29:49 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:29:49 AM
Surr: 2,4,6-Tribromophenol	57.4	21.3-145		%REC	1	10/21/2012 1:29:49 AM
Surr: 2-Fluorobiphenyl	64.7	20-131		%REC	1	10/21/2012 1:29:49 AM
Surr: 2-Fluorophenol	53.2	11.9-130		%REC	1	10/21/2012 1:29:49 AM
Surr: 4-Terphenyl-d14	59.7	25.1-149		%REC	1	10/21/2012 1:29:49 AM
Surr: Nitrobenzene-d5	63.1	25.6-137		%REC	1	10/21/2012 1:29:49 AM
Surr: Phenol-d5	61.3	20.3-132		%REC	1	10/21/2012 1:29:49 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00791	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Toluene	0.00372	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Ethylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Xylenes, Total	ND	0.00188		mg/Kg	1	10/15/2012 3:53:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,4-Trimethylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,3,5-Trimethylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dichloroethane (EDC)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dibromoethane (EDB)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Naphthalene	ND	0.00188		mg/Kg	1	10/15/2012 3:53:08 PM
1-Methylnaphthalene	ND	0.00376		mg/Kg	1	10/15/2012 3:53:08 PM
2-Methylnaphthalene	ND	0.00376		mg/Kg	1	10/15/2012 3:53:08 PM
Acetone	0.0217	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromodichloromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromoform	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Bromomethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2-Butanone	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
Carbon tetrachloride	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chloroform	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Chloromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2-Chlorotoluene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 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
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (10-12')

Project: SWMU NO.1

Collection Date: 10/11/2012 1:00:00 PM

Lab ID: 1210692-005

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
4-Chlorotoluene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
cis-1,2-DCE	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
cis-1,3-Dichloropropene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dibromo-3-chloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Dibromochloromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Dibromomethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,3-Dichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,4-Dichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Dichlorodifluoromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1-Dichloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1-Dichloroethene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2-Dichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,3-Dichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2,2-Dichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1-Dichloropropene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Hexachlorobutadiene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Isopropylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
4-Isopropyltoluene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Methylene chloride	ND	0.00282		mg/Kg	1	10/15/2012 3:53:08 PM
n-Butylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
2-Hexanone	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
n-Propylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
sec-Butylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Styrene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
4-Methyl-2-pentanone	ND	0.00939		mg/Kg	1	10/15/2012 3:53:08 PM
tert-Butylbenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,1,2-Tetrachloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,2,2-Tetrachloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Tetrachloroethene (PCE)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
trans-1,2-DCE	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
trans-1,3-Dichloropropene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,3-Trichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,4-Trichlorobenzene	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,1-Trichloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,1,2-Trichloroethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Trichloroethene (TCE)	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Trichlorofluoromethane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
1,2,3-Trichloropropane	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Vinyl chloride	ND	0.000939		mg/Kg	1	10/15/2012 3:53:08 PM
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%REC	1	10/15/2012 3:53:08 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
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Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-20 (10-12')

Project: SWMU NO.1

Collection Date: 10/11/2012 1:00:00 PM

Lab ID: 1210692-005

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	10/15/2012 3:53:08 PM
Surr: Dibromofluoromethane	111	70-130		%REC	1	10/15/2012 3:53:08 PM
Surr: Toluene-d8	86.4	70-130		%REC	1	10/15/2012 3:53:08 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 5:10:49 PM
Surr: BFB	93.2	70-130		%REC	1	10/21/2012 5:10:49 PM

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Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:20:00 PM

Lab ID: 1210692-006

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 4:11:59 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 4:11:59 PM
Surr: DNOP	97.6	77.6-140		%REC	1	10/16/2012 4:11:59 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.080	0.033		mg/kg	1	10/23/2012 4:50:01 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Barium	360	2.0		mg/Kg	20	11/2/2012 7:45:41 AM
Beryllium	0.70	0.30		mg/Kg	2	10/25/2012 9:51:21 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 9:51:21 PM
Chromium	24	0.60		mg/Kg	2	10/25/2012 9:51:21 PM
Cobalt	3.9	0.60		mg/Kg	2	10/25/2012 9:51:21 PM
Iron	14000	500		mg/Kg	500	11/2/2012 7:58:27 AM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 9:51:21 PM
Manganese	480	2.0		mg/Kg	20	11/2/2012 7:45:41 AM
Nickel	7.7	1.0		mg/Kg	2	10/25/2012 9:51:21 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 9:51:21 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
Zinc	34	5.0		mg/Kg	2	10/25/2012 9:51:21 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Benzoic acid	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM

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- H Holding times for preparation or analysis exceeded
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- R RPD outside accepted recovery limits
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Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:20:00 PM

Lab ID: 1210692-006

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 10:32:27 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 10:32:27 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 10:32:27 AM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Isophorone	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2-Methylphenol	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
Nitrobenzene	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:20:00 PM

Lab ID: 1210692-006

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 10:32:27 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:32:27 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Pyridine	ND	0.51		mg/Kg	1	10/21/2012 10:32:27 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 10:32:27 AM
Surr: 2,4,6-Tribromophenol	102	21.3-145		%REC	1	10/21/2012 10:32:27 AM
Surr: 2-Fluorobiphenyl	96.5	20-131		%REC	1	10/21/2012 10:32:27 AM
Surr: 2-Fluorophenol	90.4	11.9-130		%REC	1	10/21/2012 10:32:27 AM
Surr: 4-Terphenyl-d14	86.0	25.1-149		%REC	1	10/21/2012 10:32:27 AM
Surr: Nitrobenzene-d5	97.6	25.6-137		%REC	1	10/21/2012 10:32:27 AM
Surr: Phenol-d5	87.3	20.3-132		%REC	1	10/21/2012 10:32:27 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00204	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Toluene	0.00190	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Ethylbenzene	0.00165	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Xylenes, Total	0.00901	0.00169		mg/Kg	1	10/15/2012 4:23:53 PM
Methyl tert-butyl ether (MTBE)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,4-Trimethylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,3,5-Trimethylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dichloroethane (EDC)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dibromoethane (EDB)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Naphthalene	ND	0.00169		mg/Kg	1	10/15/2012 4:23:53 PM
1-Methylnaphthalene	ND	0.00339		mg/Kg	1	10/15/2012 4:23:53 PM
2-Methylnaphthalene	ND	0.00339		mg/Kg	1	10/15/2012 4:23:53 PM
Acetone	0.156	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromodichloromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromoform	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Bromomethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2-Butanone	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
Carbon tetrachloride	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chloroform	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Chloromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2-Chlorotoluene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:20:00 PM

Lab ID: 1210692-006

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
4-Chlorotoluene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
cis-1,2-DCE	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
cis-1,3-Dichloropropene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dibromo-3-chloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Dibromochloromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Dibromomethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,3-Dichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,4-Dichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Dichlorodifluoromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1-Dichloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1-Dichloroethene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2-Dichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,3-Dichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2,2-Dichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1-Dichloropropene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Hexachlorobutadiene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Isopropylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
4-Isopropyltoluene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Methylene chloride	ND	0.00254		mg/Kg	1	10/15/2012 4:23:53 PM
n-Butylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
2-Hexanone	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
n-Propylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
sec-Butylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Styrene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
4-Methyl-2-pentanone	ND	0.00847		mg/Kg	1	10/15/2012 4:23:53 PM
tert-Butylbenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,1,2-Tetrachloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,2,2-Tetrachloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Tetrachloroethene (PCE)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
trans-1,2-DCE	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
trans-1,3-Dichloropropene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,3-Trichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,4-Trichlorobenzene	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,1-Trichloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,1,2-Trichloroethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Trichloroethene (TCE)	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Trichlorofluoromethane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
1,2,3-Trichloropropane	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Vinyl chloride	ND	0.000847		mg/Kg	1	10/15/2012 4:23:53 PM
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%REC	1	10/15/2012 4:23:53 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:20:00 PM

Lab ID: 1210692-006

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	127	70-130		%REC	1	10/15/2012 4:23:53 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/15/2012 4:23:53 PM
Surr: Toluene-d8	90.5	70-130		%REC	1	10/15/2012 4:23:53 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 5:39:04 PM
Surr: BFB	91.5	70-130		%REC	1	10/21/2012 5:39:04 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:30:00 PM

Lab ID: 1210692-007

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 3:15:01 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 3:15:01 PM
Surr: DNOP	95.9	77.6-140		%REC	1	10/16/2012 3:15:01 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:51:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Barium	81	0.20		mg/Kg	2	10/25/2012 10:07:42 PM
Beryllium	0.84	0.30		mg/Kg	2	10/25/2012 10:07:42 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:07:42 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 10:07:42 PM
Cobalt	4.9	0.60		mg/Kg	2	10/25/2012 10:07:42 PM
Iron	20000	500		mg/Kg	500	11/2/2012 8:03:45 AM
Lead	3.2	0.50		mg/Kg	2	10/25/2012 10:07:42 PM
Manganese	600	2.0		mg/Kg	20	11/2/2012 8:01:20 AM
Nickel	8.5	1.0		mg/Kg	2	10/25/2012 10:07:42 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:07:42 PM
Vanadium	30	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
Zinc	18	5.0		mg/Kg	2	10/25/2012 10:07:42 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:30:00 PM

Lab ID: 1210692-007

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 8:36:22 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 8:36:22 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 8:36:22 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Nitroaniline	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:30:00 PM

Lab ID: 1210692-007

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 8:36:22 AM
Pentachlorophenol	ND	0.81		mg/Kg	1	10/21/2012 8:36:22 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 8:36:22 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 8:36:22 AM
Surr: 2,4,6-Tribromophenol	82.3	21.3-145		%REC	1	10/21/2012 8:36:22 AM
Surr: 2-Fluorobiphenyl	82.4	20-131		%REC	1	10/21/2012 8:36:22 AM
Surr: 2-Fluorophenol	74.9	11.9-130		%REC	1	10/21/2012 8:36:22 AM
Surr: 4-Terphenyl-d14	79.4	25.1-149		%REC	1	10/21/2012 8:36:22 AM
Surr: Nitrobenzene-d5	84.4	25.6-137		%REC	1	10/21/2012 8:36:22 AM
Surr: Phenol-d5	80.7	20.3-132		%REC	1	10/21/2012 8:36:22 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00122	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Toluene	0.00114	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Ethylbenzene	0.00135	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Xylenes, Total	0.00793	0.00158		mg/Kg	1	10/15/2012 4:54:48 PM
Methyl tert-butyl ether (MTBE)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,4-Trimethylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,3,5-Trimethylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dichloroethane (EDC)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dibromoethane (EDB)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Naphthalene	ND	0.00158		mg/Kg	1	10/15/2012 4:54:48 PM
1-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/15/2012 4:54:48 PM
2-Methylnaphthalene	ND	0.00316		mg/Kg	1	10/15/2012 4:54:48 PM
Acetone	0.158	0.00789	E	mg/Kg	1	10/15/2012 4:54:48 PM
Bromobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Bromodichloromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Bromoform	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Bromomethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2-Butanone	0.0138	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
Carbon tetrachloride	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chloroform	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Chloromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2-Chlorotoluene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:30:00 PM

Lab ID: 1210692-007

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
4-Chlorotoluene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
cis-1,2-DCE	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
cis-1,3-Dichloropropene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dibromo-3-chloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Dibromochloromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Dibromomethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,3-Dichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,4-Dichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Dichlorodifluoromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1-Dichloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1-Dichloroethene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2-Dichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,3-Dichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2,2-Dichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1-Dichloropropene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Hexachlorobutadiene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Isopropylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
4-Isopropyltoluene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Methylene chloride	ND	0.00237		mg/Kg	1	10/15/2012 4:54:48 PM
n-Butylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
2-Hexanone	ND	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
n-Propylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
sec-Butylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Styrene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
4-Methyl-2-pentanone	ND	0.00789		mg/Kg	1	10/15/2012 4:54:48 PM
tert-Butylbenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,1,2-Tetrachloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,2,2-Tetrachloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Tetrachloroethene (PCE)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
trans-1,2-DCE	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
trans-1,3-Dichloropropene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,3-Trichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,4-Trichlorobenzene	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,1-Trichloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,1,2-Trichloroethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Trichloroethene (TCE)	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Trichlorofluoromethane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
1,2,3-Trichloropropane	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Vinyl chloride	ND	0.000789		mg/Kg	1	10/15/2012 4:54:48 PM
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	1	10/15/2012 4:54:48 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:30:00 PM

Lab ID: 1210692-007

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	127	70-130		%REC	1	10/15/2012 4:54:48 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/15/2012 4:54:48 PM
Surr: Toluene-d8	98.6	70-130		%REC	1	10/15/2012 4:54:48 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 6:07:43 PM
Surr: BFB	93.4	70-130		%REC	1	10/21/2012 6:07:43 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (6-8')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:45:00 PM

Lab ID: 1210692-008

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 11:50:24 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 11:50:24 AM
Surr: DNOP	90.9	77.6-140		%REC	1	10/16/2012 11:50:24 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 4:57:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Barium	540	2.0		mg/Kg	20	11/2/2012 8:06:38 AM
Beryllium	0.90	0.30		mg/Kg	2	10/25/2012 10:15:17 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:15:17 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 10:15:17 PM
Cobalt	5.2	0.60		mg/Kg	2	10/25/2012 10:15:17 PM
Iron	22000	500		mg/Kg	500	11/2/2012 8:09:03 AM
Lead	ND	0.50		mg/Kg	2	10/25/2012 10:15:17 PM
Manganese	570	2.0		mg/Kg	20	11/2/2012 8:06:38 AM
Nickel	11	1.0		mg/Kg	2	10/25/2012 10:15:17 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:15:17 PM
Vanadium	26	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
Zinc	22	5.0		mg/Kg	2	10/25/2012 10:15:17 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM

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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (6-8')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:45:00 PM

Lab ID: 1210692-008

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 1:58:57 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 1:58:57 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 1:58:57 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 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
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (6-8')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:45:00 PM

Lab ID: 1210692-008

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 1:58:57 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 1:58:57 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 1:58:57 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 1:58:57 AM
Surr: 2,4,6-Tribromophenol	70.4	21.3-145		%REC	1	10/21/2012 1:58:57 AM
Surr: 2-Fluorobiphenyl	82.7	20-131		%REC	1	10/21/2012 1:58:57 AM
Surr: 2-Fluorophenol	74.2	11.9-130		%REC	1	10/21/2012 1:58:57 AM
Surr: 4-Terphenyl-d14	70.8	25.1-149		%REC	1	10/21/2012 1:58:57 AM
Surr: Nitrobenzene-d5	89.8	25.6-137		%REC	1	10/21/2012 1:58:57 AM
Surr: Phenol-d5	76.7	20.3-132		%REC	1	10/21/2012 1:58:57 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.0114	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Toluene	0.00448	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Ethylbenzene	0.00107	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Xylenes, Total	0.00276	0.00160		mg/Kg	1	10/15/2012 5:25:42 PM
Methyl tert-butyl ether (MTBE)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,4-Trimethylbenzene	0.00123	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,3,5-Trimethylbenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dichloroethane (EDC)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dibromoethane (EDB)	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Naphthalene	ND	0.00160		mg/Kg	1	10/15/2012 5:25:42 PM
1-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/15/2012 5:25:42 PM
2-Methylnaphthalene	ND	0.00320		mg/Kg	1	10/15/2012 5:25:42 PM
Acetone	0.0250	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromodichloromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromoform	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Bromomethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
2-Butanone	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Carbon tetrachloride	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chlorobenzene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chloroethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chloroform	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
Chloromethane	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 PM
2-Chlorotoluene	ND	0.000801		mg/Kg	1	10/15/2012 5:25:42 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (6-8')

Project: SWMU NO.1

Collection Date: 10/11/2012 2:45:00 PM

Lab ID: 1210692-008

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
4-Chlorotoluene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
cis-1,2-DCE	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
cis-1,3-Dichloropropene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dibromo-3-chloropropane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Dibromochloromethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Dibromomethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dichlorobenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,3-Dichlorobenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,4-Dichlorobenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Dichlorodifluoromethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1-Dichloroethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1-Dichloroethene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2-Dichloropropane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,3-Dichloropropane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
2,2-Dichloropropane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1-Dichloropropene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Hexachlorobutadiene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Isopropylbenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
4-Isopropyltoluene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Methylene chloride	ND	0.00240		mg/Kg	1	10/15/2012 5:25:42 PM
n-Butylbenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
2-Hexanone	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
n-Propylbenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
sec-Butylbenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Styrene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
4-Methyl-2-pentanone	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
tert-Butylbenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,1,2-Tetrachloroethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,2,2-Tetrachloroethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Tetrachloroethene (PCE)	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
trans-1,2-DCE	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
trans-1,3-Dichloropropene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,3-Trichlorobenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,4-Trichlorobenzene	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,1-Trichloroethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,1,2-Trichloroethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Trichloroethene (TCE)	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Trichlorofluoromethane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
1,2,3-Trichloropropane	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Vinyl chloride	ND	0.00801		mg/Kg	1	10/15/2012 5:25:42 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	10/15/2012 5:25:42 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-38 (6-8")

Project: SWMU NO.1

Collection Date: 10/11/2012 2:45:00 PM

Lab ID: 1210692-008

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	10/15/2012 5:25:42 PM
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/15/2012 5:25:42 PM
Surr: Toluene-d8	103	70-130		%REC	1	10/15/2012 5:25:42 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 6:36:19 PM
Surr: BFB	86.4	70-130		%REC	1	10/21/2012 6:36:19 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:00:00 AM

Lab ID: 1210692-009

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 4:37:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 4:37:23 PM
Surr: DNOP	83.3	77.6-140		%REC	1	10/16/2012 4:37:23 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.054	0.033		mg/kg	1	10/23/2012 4:58:51 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Barium	560	2.0		mg/Kg	20	11/2/2012 8:11:40 AM
Beryllium	0.60	0.30		mg/Kg	2	10/25/2012 10:21:12 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:21:12 PM
Chromium	8.0	0.60		mg/Kg	2	10/25/2012 10:21:12 PM
Cobalt	2.9	0.60		mg/Kg	2	10/25/2012 10:21:12 PM
Iron	11000	500		mg/Kg	500	11/2/2012 8:14:06 AM
Lead	1.4	0.50		mg/Kg	2	10/25/2012 10:21:12 PM
Manganese	470	2.0		mg/Kg	20	11/2/2012 8:11:40 AM
Nickel	5.8	1.0		mg/Kg	2	10/25/2012 10:21:12 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:21:12 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
Zinc	15	5.0		mg/Kg	2	10/25/2012 10:21:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:00:00 AM

Lab ID: 1210692-009

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 9:05:15 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 9:05:15 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 9:05:15 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:00:00 AM

Lab ID: 1210692-009

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 9:05:15 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 9:05:15 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 9:05:15 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 9:05:15 AM
Surr: 2,4,6-Tribromophenol	78.1	21.3-145		%REC	1	10/21/2012 9:05:15 AM
Surr: 2-Fluorobiphenyl	91.7	20-131		%REC	1	10/21/2012 9:05:15 AM
Surr: 2-Fluorophenol	72.8	11.9-130		%REC	1	10/21/2012 9:05:15 AM
Surr: 4-Terphenyl-d14	84.8	25.1-149		%REC	1	10/21/2012 9:05:15 AM
Surr: Nitrobenzene-d5	89.6	25.6-137		%REC	1	10/21/2012 9:05:15 AM
Surr: Phenol-d5	78.1	20.3-132		%REC	1	10/21/2012 9:05:15 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00213	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Toluene	0.0114	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Ethylbenzene	0.0636	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Xylenes, Total	0.447	0.00187	E	mg/Kg	1	10/15/2012 11:04:19 PM
Methyl tert-butyl ether (MTBE)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,4-Trimethylbenzene	0.00844	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,3,5-Trimethylbenzene	0.00334	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dichloroethane (EDC)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dibromoethane (EDB)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Naphthalene	ND	0.00187		mg/Kg	1	10/15/2012 11:04:19 PM
1-Methylnaphthalene	ND	0.00375		mg/Kg	1	10/15/2012 11:04:19 PM
2-Methylnaphthalene	ND	0.00375		mg/Kg	1	10/15/2012 11:04:19 PM
Acetone	2.44	0.00937	E	mg/Kg	1	10/15/2012 11:04:19 PM
Bromobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Bromodichloromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Bromoform	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Bromomethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2-Butanone	0.0722	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
Carbon tetrachloride	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chloroform	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Chloromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2-Chlorotoluene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:00:00 AM

Lab ID: 1210692-009

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
4-Chlorotoluene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
cis-1,2-DCE	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
cis-1,3-Dichloropropene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dibromo-3-chloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Dibromochloromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Dibromomethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,3-Dichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,4-Dichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Dichlorodifluoromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1-Dichloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1-Dichloroethene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2-Dichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,3-Dichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2,2-Dichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1-Dichloropropene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Hexachlorobutadiene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Isopropylbenzene	0.00310	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
4-Isopropyltoluene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Methylene chloride	ND	0.00281		mg/Kg	1	10/15/2012 11:04:19 PM
n-Butylbenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
2-Hexanone	ND	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
n-Propylbenzene	0.00173	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
sec-Butylbenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Styrene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
4-Methyl-2-pentanone	ND	0.00937		mg/Kg	1	10/15/2012 11:04:19 PM
tert-Butylbenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,1,2-Tetrachloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,2,2-Tetrachloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Tetrachloroethene (PCE)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
trans-1,2-DCE	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
trans-1,3-Dichloropropene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,3-Trichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,4-Trichlorobenzene	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,1-Trichloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,1,2-Trichloroethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Trichloroethene (TCE)	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Trichlorofluoromethane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
1,2,3-Trichloropropane	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Vinyl chloride	ND	0.000937		mg/Kg	1	10/15/2012 11:04:19 PM
Surr: 1,2-Dichloroethane-d4	88.0	70-130		%REC	1	10/15/2012 11:04:19 PM

Qualifiers:

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- 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:00:00 AM

Lab ID: 1210692-009

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	10/15/2012 11:04:19 PM
Surr: Dibromofluoromethane	97.0	70-130		%REC	1	10/15/2012 11:04:19 PM
Surr: Toluene-d8	91.0	70-130		%REC	1	10/15/2012 11:04:19 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	9.3	5.0		mg/Kg	1	10/21/2012 7:04:38 PM
Surr: BFB	94.8	70-130		%REC	1	10/21/2012 7:04:38 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
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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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:15:00 AM

Lab ID: 1210692-010

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 12:12:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 12:12:00 PM
Surr: DNOP	97.4	77.6-140		%REC	1	10/16/2012 12:12:00 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:00:37 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	13		mg/Kg	5	11/2/2012 8:17:00 AM
Arsenic	ND	13		mg/Kg	5	11/2/2012 8:17:00 AM
Barium	750	5.0		mg/Kg	50	11/2/2012 10:02:03 AM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 8:17:00 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 8:17:00 AM
Chromium	8.0	1.5		mg/Kg	5	11/2/2012 8:17:00 AM
Cobalt	4.3	1.5		mg/Kg	5	11/2/2012 8:17:00 AM
Iron	11000	500		mg/Kg	500	11/2/2012 10:06:05 AM
Lead	2.7	1.3		mg/Kg	5	11/2/2012 8:17:00 AM
Manganese	1300	5.0		mg/Kg	50	11/2/2012 10:02:03 AM
Nickel	6.0	2.5		mg/Kg	5	11/2/2012 8:17:00 AM
Selenium	ND	13		mg/Kg	5	11/2/2012 8:17:00 AM
Silver	ND	1.3		mg/Kg	5	11/2/2012 8:17:00 AM
Vanadium	20	13		mg/Kg	5	11/2/2012 8:17:00 AM
Zinc	13	13		mg/Kg	5	11/2/2012 8:17:00 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:15:00 AM

Lab ID: 1210692-010

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 12:59:09 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 12:59:09 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 12:59:09 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:15:00 AM

Lab ID: 1210692-010

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 12:59:09 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 12:59:09 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 12:59:09 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 12:59:09 PM
Surr: 2,4,6-Tribromophenol	93.4	21.3-145		%REC	1	10/21/2012 12:59:09 PM
Surr: 2-Fluorobiphenyl	86.2	20-131		%REC	1	10/21/2012 12:59:09 PM
Surr: 2-Fluorophenol	92.9	11.9-130		%REC	1	10/21/2012 12:59:09 PM
Surr: 4-Terphenyl-d14	73.6	25.1-149		%REC	1	10/21/2012 12:59:09 PM
Surr: Nitrobenzene-d5	91.3	25.6-137		%REC	1	10/21/2012 12:59:09 PM
Surr: Phenol-d5	90.3	20.3-132		%REC	1	10/21/2012 12:59:09 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00130	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Toluene	0.00240	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Ethylbenzene	0.00135	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Xylenes, Total	0.00781	0.00150		mg/Kg	1	10/15/2012 5:56:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,4-Trimethylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,3,5-Trimethylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dichloroethane (EDC)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dibromoethane (EDB)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Naphthalene	ND	0.00150		mg/Kg	1	10/15/2012 5:56:34 PM
1-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/15/2012 5:56:34 PM
2-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/15/2012 5:56:34 PM
Acetone	0.169	0.00752	E	mg/Kg	1	10/15/2012 5:56:34 PM
Bromobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Bromodichloromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Bromoform	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Bromomethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2-Butanone	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
Carbon tetrachloride	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chloroform	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Chloromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2-Chlorotoluene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:15:00 AM

Lab ID: 1210692-010

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
4-Chlorotoluene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
cis-1,2-DCE	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
cis-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dibromo-3-chloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Dibromochloromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Dibromomethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,3-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,4-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Dichlorodifluoromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1-Dichloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1-Dichloroethene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,3-Dichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1-Dichloropropene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Hexachlorobutadiene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Isopropylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
4-Isopropyltoluene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Methylene chloride	ND	0.00226		mg/Kg	1	10/15/2012 5:56:34 PM
n-Butylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
2-Hexanone	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
n-Propylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
sec-Butylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Styrene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
4-Methyl-2-pentanone	ND	0.00752		mg/Kg	1	10/15/2012 5:56:34 PM
tert-Butylbenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,1,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,2,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Tetrachloroethene (PCE)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
trans-1,2-DCE	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
trans-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,3-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,4-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,1-Trichloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,1,2-Trichloroethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Trichloroethene (TCE)	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Trichlorofluoromethane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
1,2,3-Trichloropropane	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Vinyl chloride	ND	0.000752		mg/Kg	1	10/15/2012 5:56:34 PM
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%REC	1	10/15/2012 5:56:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-27 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:15:00 AM

Lab ID: 1210692-010

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	1	10/15/2012 5:56:34 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/15/2012 5:56:34 PM
Surr: Toluene-d8	99.8	70-130		%REC	1	10/15/2012 5:56:34 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 7:32:58 PM
Surr: BFB	89.0	70-130		%REC	1	10/21/2012 7:32:58 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:50:00 AM

Lab ID: 1210692-011

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	27	10		mg/Kg	1	10/17/2012 11:25:46 AM
Motor Oil Range Organics (MRO)	53	51		mg/Kg	1	10/17/2012 11:25:46 AM
Surr: DNOP	92.3	77.6-140		%REC	1	10/17/2012 11:25:46 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.67	0.16		mg/kg	5	10/23/2012 7:09:55 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Barium	490	2.0		mg/Kg	20	11/2/2012 8:19:27 AM
Beryllium	0.70	0.30		mg/Kg	2	10/25/2012 10:32:52 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:32:52 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 10:32:52 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 10:32:52 PM
Iron	13000	500		mg/Kg	500	11/2/2012 8:24:30 AM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 10:32:52 PM
Manganese	520	2.0		mg/Kg	20	11/2/2012 8:19:27 AM
Nickel	7.1	1.0		mg/Kg	2	10/25/2012 10:32:52 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:32:52 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
Zinc	19	5.0		mg/Kg	2	10/25/2012 10:32:52 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:50:00 AM

Lab ID: 1210692-011

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 2:27:36 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 2:27:36 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 2:27:36 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:50:00 AM

Lab ID: 1210692-011

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 2:27:36 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:27:36 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 2:27:36 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:27:36 PM
Surr: 2,4,6-Tribromophenol	92.9	21.3-145		%REC	1	10/21/2012 2:27:36 PM
Surr: 2-Fluorobiphenyl	96.6	20-131		%REC	1	10/21/2012 2:27:36 PM
Surr: 2-Fluorophenol	84.7	11.9-130		%REC	1	10/21/2012 2:27:36 PM
Surr: 4-Terphenyl-d14	90.5	25.1-149		%REC	1	10/21/2012 2:27:36 PM
Surr: Nitrobenzene-d5	100	25.6-137		%REC	1	10/21/2012 2:27:36 PM
Surr: Phenol-d5	91.8	20.3-132		%REC	1	10/21/2012 2:27:36 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00299	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Toluene	0.00473	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Ethylbenzene	0.00180	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Xylenes, Total	0.00910	0.00202		mg/Kg	1	10/15/2012 6:27:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,4-Trimethylbenzene	0.00209	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Naphthalene	ND	0.00202		mg/Kg	1	10/15/2012 6:27:22 PM
1-Methylnaphthalene	ND	0.00405		mg/Kg	1	10/15/2012 6:27:22 PM
2-Methylnaphthalene	ND	0.00405		mg/Kg	1	10/15/2012 6:27:22 PM
Acetone	0.135	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromoform	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2-Butanone	0.0161	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chloroform	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:50:00 AM

Lab ID: 1210692-011

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Methylene chloride	ND	0.00303		mg/Kg	1	10/15/2012 6:27:22 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Styrene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/15/2012 6:27:22 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/15/2012 6:27:22 PM
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	10/15/2012 6:27:22 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 9:50:00 AM

Lab ID: 1210692-011

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	10/15/2012 6:27:22 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/15/2012 6:27:22 PM
Surr: Toluene-d8	99.5	70-130		%REC	1	10/15/2012 6:27:22 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 8:01:27 PM
Surr: BFB	90.4	70-130		%REC	1	10/21/2012 8:01:27 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-012

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 12:33:45 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 12:33:45 PM
Surr: DNOP	92.8	77.6-140		%REC	1	10/16/2012 12:33:45 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:04:21 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Barium	570	2.0		mg/Kg	20	11/2/2012 8:36:09 AM
Beryllium	0.41	0.30		mg/Kg	2	10/25/2012 10:48:56 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 10:48:56 PM
Chromium	5.2	0.60		mg/Kg	2	10/25/2012 10:48:56 PM
Cobalt	2.7	0.60		mg/Kg	2	10/25/2012 10:48:56 PM
Iron	8800	500		mg/Kg	500	11/2/2012 8:38:33 AM
Lead	1.4	0.50		mg/Kg	2	10/25/2012 10:48:56 PM
Manganese	430	2.0		mg/Kg	20	11/2/2012 8:36:09 AM
Nickel	3.7	1.0		mg/Kg	2	10/25/2012 10:48:56 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 10:48:56 PM
Vanadium	12	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
Zinc	8.8	5.0		mg/Kg	2	10/25/2012 10:48:56 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-012

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 2:57:01 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 2:57:01 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 2:57:01 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 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
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-012

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 2:57:01 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:57:01 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 2:57:01 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 2:57:01 AM
Surr: 2,4,6-Tribromophenol	90.2	21.3-145		%REC	1	10/21/2012 2:57:01 AM
Surr: 2-Fluorobiphenyl	87.9	20-131		%REC	1	10/21/2012 2:57:01 AM
Surr: 2-Fluorophenol	86.7	11.9-130		%REC	1	10/21/2012 2:57:01 AM
Surr: 4-Terphenyl-d14	85.4	25.1-149		%REC	1	10/21/2012 2:57:01 AM
Surr: Nitrobenzene-d5	93.5	25.6-137		%REC	1	10/21/2012 2:57:01 AM
Surr: Phenol-d5	90.6	20.3-132		%REC	1	10/21/2012 2:57:01 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	2.53	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Toluene	3.54	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Ethylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Xylenes, Total	2.38	2.03		mg/Kg	1	10/15/2012 6:58:08 PM
Methyl tert-butyl ether (MTBE)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,4-Trimethylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,3,5-Trimethylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dichloroethane (EDC)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dibromoethane (EDB)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Naphthalene	ND	2.03		mg/Kg	1	10/15/2012 6:58:08 PM
1-Methylnaphthalene	ND	4.05		mg/Kg	1	10/15/2012 6:58:08 PM
2-Methylnaphthalene	ND	4.05		mg/Kg	1	10/15/2012 6:58:08 PM
Acetone	54.1	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
Bromobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Bromodichloromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Bromoform	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Bromomethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2-Butanone	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
Carbon tetrachloride	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chloroform	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Chloromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2-Chlorotoluene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-012

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
4-Chlorotoluene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
cis-1,2-DCE	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
cis-1,3-Dichloropropene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dibromo-3-chloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Dibromochloromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Dibromomethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,3-Dichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,4-Dichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Dichlorodifluoromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1-Dichloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1-Dichloroethene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2-Dichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,3-Dichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2,2-Dichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1-Dichloropropene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Hexachlorobutadiene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Isopropylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
4-Isopropyltoluene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Methylene chloride	ND	3.04		mg/Kg	1	10/15/2012 6:58:08 PM
n-Butylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
2-Hexanone	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
n-Propylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
sec-Butylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Styrene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
4-Methyl-2-pentanone	ND	10.1		mg/Kg	1	10/15/2012 6:58:08 PM
tert-Butylbenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,1,2-Tetrachloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,2,2-Tetrachloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Tetrachloroethene (PCE)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
trans-1,2-DCE	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
trans-1,3-Dichloropropene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,3-Trichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,4-Trichlorobenzene	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,1-Trichloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,1,2-Trichloroethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Trichloroethene (TCE)	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Trichlorofluoromethane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
1,2,3-Trichloropropane	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Vinyl chloride	ND	1.01		mg/Kg	1	10/15/2012 6:58:08 PM
Surr: 1,2-Dichloroethane-d4	87.7	70-130		%REC	1	10/15/2012 6:58:08 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-012

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/15/2012 6:58:08 PM
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	10/15/2012 6:58:08 PM
Surr: Toluene-d8	99.2	70-130		%REC	1	10/15/2012 6:58:08 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 8:29:46 PM
Surr: BFB	94.2	70-130		%REC	1	10/21/2012 8:29:46 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-013

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 12:55:28 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 12:55:28 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/16/2012 12:55:28 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:06:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
Arsenic	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
Barium	630	2.0		mg/Kg	20	11/2/2012 10:08:56 AM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 8:41:27 AM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 8:41:27 AM
Chromium	6.0	1.5		mg/Kg	5	11/2/2012 8:41:27 AM
Cobalt	4.1	1.5		mg/Kg	5	11/2/2012 8:41:27 AM
Iron	10000	500		mg/Kg	500	11/2/2012 10:11:20 AM
Lead	3.1	1.2		mg/Kg	5	11/2/2012 8:41:27 AM
Manganese	680	2.0		mg/Kg	20	11/2/2012 10:08:56 AM
Nickel	4.8	2.5		mg/Kg	5	11/2/2012 8:41:27 AM
Selenium	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
Silver	ND	1.2		mg/Kg	5	11/2/2012 8:41:27 AM
Vanadium	22	12		mg/Kg	5	11/2/2012 8:41:27 AM
Zinc	ND	12		mg/Kg	5	11/2/2012 8:41:27 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-013

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 3:25:59 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 3:25:59 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 3:25:59 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-013

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 3:25:59 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:25:59 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 3:25:59 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:25:59 AM
Surr: 2,4,6-Tribromophenol	90.5	21.3-145		%REC	1	10/21/2012 3:25:59 AM
Surr: 2-Fluorobiphenyl	89.6	20-131		%REC	1	10/21/2012 3:25:59 AM
Surr: 2-Fluorophenol	84.6	11.9-130		%REC	1	10/21/2012 3:25:59 AM
Surr: 4-Terphenyl-d14	80.7	25.1-149		%REC	1	10/21/2012 3:25:59 AM
Surr: Nitrobenzene-d5	92.6	25.6-137		%REC	1	10/21/2012 3:25:59 AM
Surr: Phenol-d5	86.9	20.3-132		%REC	1	10/21/2012 3:25:59 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	2.48	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Toluene	2.86	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Ethylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Xylenes, Total	1.64	1.57		mg/Kg	1	10/15/2012 7:28:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,4-Trimethylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,3,5-Trimethylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dichloroethane (EDC)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dibromoethane (EDB)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Naphthalene	ND	1.57		mg/Kg	1	10/15/2012 7:28:52 PM
1-Methylnaphthalene	ND	3.15		mg/Kg	1	10/15/2012 7:28:52 PM
2-Methylnaphthalene	ND	3.15		mg/Kg	1	10/15/2012 7:28:52 PM
Acetone	34.8	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
Bromobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Bromodichloromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Bromoform	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Bromomethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2-Butanone	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
Carbon tetrachloride	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chloroform	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Chloromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2-Chlorotoluene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-013

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
4-Chlorotoluene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
cis-1,2-DCE	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
cis-1,3-Dichloropropene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dibromo-3-chloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Dibromochloromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Dibromomethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,3-Dichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,4-Dichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Dichlorodifluoromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1-Dichloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1-Dichloroethene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2-Dichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,3-Dichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2,2-Dichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1-Dichloropropene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Hexachlorobutadiene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Isopropylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
4-Isopropyltoluene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Methylene chloride	ND	2.36		mg/Kg	1	10/15/2012 7:28:52 PM
n-Butylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
2-Hexanone	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
n-Propylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
sec-Butylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Styrene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
4-Methyl-2-pentanone	ND	7.87		mg/Kg	1	10/15/2012 7:28:52 PM
tert-Butylbenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,1,2-Tetrachloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,2,2-Tetrachloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Tetrachloroethene (PCE)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
trans-1,2-DCE	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
trans-1,3-Dichloropropene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,3-Trichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,4-Trichlorobenzene	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,1-Trichloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,1,2-Trichloroethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Trichloroethene (TCE)	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Trichlorofluoromethane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
1,2,3-Trichloropropane	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Vinyl chloride	ND	0.787		mg/Kg	1	10/15/2012 7:28:52 PM
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%REC	1	10/15/2012 7:28:52 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-28 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 10:10:00 AM

Lab ID: 1210692-013

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	10/15/2012 7:28:52 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/15/2012 7:28:52 PM
Surr: Toluene-d8	96.5	70-130		%REC	1	10/15/2012 7:28:52 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 8:58:09 PM
Surr: BFB	93.8	70-130		%REC	1	10/21/2012 8:58:09 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 11:40:00 AM

Lab ID: 1210692-014

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	17	10		mg/Kg	1	10/17/2012 11:47:30 AM
Motor Oil Range Organics (MRO)	79	51		mg/Kg	1	10/17/2012 11:47:30 AM
Surr: DNOP	90.9	77.6-140		%REC	1	10/17/2012 11:47:30 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.13	0.033		mg/kg	1	10/23/2012 5:07:58 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Barium	580	2.0		mg/Kg	20	11/2/2012 8:51:14 AM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 11:16:17 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:16:17 PM
Chromium	13	0.60		mg/Kg	2	10/25/2012 11:16:17 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 11:16:17 PM
Iron	14000	500		mg/Kg	500	11/2/2012 8:53:39 AM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 11:16:17 PM
Manganese	550	2.0		mg/Kg	20	11/2/2012 8:51:14 AM
Nickel	7.3	1.0		mg/Kg	2	10/25/2012 11:16:17 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:16:17 PM
Vanadium	21	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
Zinc	26	5.0		mg/Kg	2	10/25/2012 11:16:17 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 11:40:00 AM

Lab ID: 1210692-014

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 2:56:55 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 2:56:55 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 2:56:55 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
3-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 11:40:00 AM

Lab ID: 1210692-014

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 2:56:55 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 2:56:55 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 2:56:55 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 2:56:55 PM
Surr: 2,4,6-Tribromophenol	56.8	21.3-145		%REC	1	10/21/2012 2:56:55 PM
Surr: 2-Fluorobiphenyl	56.8	20-131		%REC	1	10/21/2012 2:56:55 PM
Surr: 2-Fluorophenol	51.4	11.9-130		%REC	1	10/21/2012 2:56:55 PM
Surr: 4-Terphenyl-d14	60.0	25.1-149		%REC	1	10/21/2012 2:56:55 PM
Surr: Nitrobenzene-d5	63.8	25.6-137		%REC	1	10/21/2012 2:56:55 PM
Surr: Phenol-d5	57.3	20.3-132		%REC	1	10/21/2012 2:56:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00240	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Toluene	0.00603	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Ethylbenzene	0.00644	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Xylenes, Total	0.0493	0.00202		mg/Kg	1	10/15/2012 7:59:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,4-Trimethylbenzene	0.00268	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,3,5-Trimethylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dichloroethane (EDC)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dibromoethane (EDB)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Naphthalene	ND	0.00202		mg/Kg	1	10/15/2012 7:59:34 PM
1-Methylnaphthalene	ND	0.00404		mg/Kg	1	10/15/2012 7:59:34 PM
2-Methylnaphthalene	ND	0.00404		mg/Kg	1	10/15/2012 7:59:34 PM
Acetone	0.692	0.0101	E	mg/Kg	1	10/15/2012 7:59:34 PM
Bromobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Bromodichloromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Bromoform	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Bromomethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2-Butanone	0.0213	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
Carbon tetrachloride	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chloroform	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Chloromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 11:40:00 AM

Lab ID: 1210692-014

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
4-Chlorotoluene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
cis-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
cis-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dibromo-3-chloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Dibromochloromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Dibromomethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,3-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,4-Dichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Dichlorodifluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1-Dichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1-Dichloroethene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,3-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2,2-Dichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Hexachlorobutadiene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Isopropylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
4-Isopropyltoluene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Methylene chloride	ND	0.00303		mg/Kg	1	10/15/2012 7:59:34 PM
n-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
2-Hexanone	ND	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
n-Propylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
sec-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Styrene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
4-Methyl-2-pentanone	ND	0.0101		mg/Kg	1	10/15/2012 7:59:34 PM
tert-Butylbenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,1,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,2,2-Tetrachloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Tetrachloroethene (PCE)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
trans-1,2-DCE	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
trans-1,3-Dichloropropene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,3-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,4-Trichlorobenzene	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,1-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,1,2-Trichloroethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Trichloroethene (TCE)	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Trichlorofluoromethane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
1,2,3-Trichloropropane	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Vinyl chloride	ND	0.00101		mg/Kg	1	10/15/2012 7:59:34 PM
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%REC	1	10/15/2012 7:59:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 11:40:00 AM

Lab ID: 1210692-014

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/15/2012 7:59:34 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/15/2012 7:59:34 PM
Surr: Toluene-d8	91.1	70-130		%REC	1	10/15/2012 7:59:34 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 11:19:31 PM
Surr: BFB	97.4	70-130		%REC	1	10/21/2012 11:19:31 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:00:00 PM

Lab ID: 1210692-015

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	23	9.9		mg/Kg	1	10/17/2012 11:03:58 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/17/2012 11:03:58 AM
Surr: DNOP	94.2	77.6-140		%REC	1	10/17/2012 11:03:58 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.14	0.033		mg/kg	1	10/23/2012 5:09:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Barium	610	2.0		mg/Kg	20	11/2/2012 8:58:09 AM
Beryllium	0.67	0.30		mg/Kg	2	10/25/2012 11:32:24 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:32:24 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 11:32:24 PM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 11:32:24 PM
Iron	14000	500		mg/Kg	500	11/2/2012 9:00:35 AM
Lead	3.1	0.50		mg/Kg	2	10/25/2012 11:32:24 PM
Manganese	530	2.0		mg/Kg	20	11/2/2012 8:58:09 AM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 11:32:24 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:32:24 PM
Vanadium	17	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
Zinc	19	5.0		mg/Kg	2	10/25/2012 11:32:24 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Acenaphthylene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Aniline	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Anthracene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Azobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:00:00 PM

Lab ID: 1210692-015

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/21/2012 3:26:18 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Chrysene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Dibenzofuran	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/21/2012 3:26:18 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/21/2012 3:26:18 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
Fluoranthene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Fluorene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Hexachloroethane	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Isophorone	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Naphthalene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
3-Nitroaniline	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:00:00 PM

Lab ID: 1210692-015

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/21/2012 3:26:18 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/21/2012 3:26:18 PM
Phenanthrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Phenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Pyrene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Pyridine	ND	2.5		mg/Kg	1	10/21/2012 3:26:18 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/21/2012 3:26:18 PM
Surr: 2,4,6-Tribromophenol	94.8	21.3-145		%REC	1	10/21/2012 3:26:18 PM
Surr: 2-Fluorobiphenyl	96.7	20-131		%REC	1	10/21/2012 3:26:18 PM
Surr: 2-Fluorophenol	82.5	11.9-130		%REC	1	10/21/2012 3:26:18 PM
Surr: 4-Terphenyl-d14	102	25.1-149		%REC	1	10/21/2012 3:26:18 PM
Surr: Nitrobenzene-d5	92.1	25.6-137		%REC	1	10/21/2012 3:26:18 PM
Surr: Phenol-d5	92.2	20.3-132		%REC	1	10/21/2012 3:26:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00140	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Toluene	0.00263	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Ethylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Xylenes, Total	0.00149	0.00140		mg/Kg	1	10/15/2012 8:30:17 PM
Methyl tert-butyl ether (MTBE)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,4-Trimethylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,3,5-Trimethylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dichloroethane (EDC)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dibromoethane (EDB)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Naphthalene	ND	0.00140		mg/Kg	1	10/15/2012 8:30:17 PM
1-Methylnaphthalene	ND	0.00279		mg/Kg	1	10/15/2012 8:30:17 PM
2-Methylnaphthalene	ND	0.00279		mg/Kg	1	10/15/2012 8:30:17 PM
Acetone	0.0541	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromodichloromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromoform	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Bromomethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2-Butanone	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
Carbon tetrachloride	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chloroform	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Chloromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2-Chlorotoluene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:00:00 PM

Lab ID: 1210692-015

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
4-Chlorotoluene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
cis-1,2-DCE	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
cis-1,3-Dichloropropene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dibromo-3-chloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Dibromochloromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Dibromomethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,3-Dichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,4-Dichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Dichlorodifluoromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1-Dichloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1-Dichloroethene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2-Dichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,3-Dichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2,2-Dichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1-Dichloropropene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Hexachlorobutadiene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Isopropylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
4-Isopropyltoluene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Methylene chloride	ND	0.00209		mg/Kg	1	10/15/2012 8:30:17 PM
n-Butylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
2-Hexanone	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
n-Propylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
sec-Butylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Styrene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
4-Methyl-2-pentanone	ND	0.00698		mg/Kg	1	10/15/2012 8:30:17 PM
tert-Butylbenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,1,2-Tetrachloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,2,2-Tetrachloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Tetrachloroethene (PCE)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
trans-1,2-DCE	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
trans-1,3-Dichloropropene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,3-Trichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,4-Trichlorobenzene	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,1-Trichloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,1,2-Trichloroethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Trichloroethene (TCE)	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Trichlorofluoromethane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
1,2,3-Trichloropropane	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Vinyl chloride	ND	0.000698		mg/Kg	1	10/15/2012 8:30:17 PM
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/15/2012 8:30:17 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:00:00 PM

Lab ID: 1210692-015

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	1	10/15/2012 8:30:17 PM
Surr: Dibromofluoromethane	99.4	70-130		%REC	1	10/15/2012 8:30:17 PM
Surr: Toluene-d8	106	70-130		%REC	1	10/15/2012 8:30:17 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/21/2012 11:47:58 PM
Surr: BFB	87.9	70-130		%REC	1	10/21/2012 11:47:58 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:10:00 PM

Lab ID: 1210692-016

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/16/2012 6:43:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/16/2012 6:43:28 PM
Surr: DNOP	102	77.6-140		%REC	1	10/16/2012 6:43:28 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:11:32 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Barium	870	2.0		mg/Kg	20	11/2/2012 9:12:14 AM
Beryllium	0.47	0.30		mg/Kg	2	10/25/2012 11:38:10 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:38:10 PM
Chromium	7.5	0.60		mg/Kg	2	10/25/2012 11:38:10 PM
Cobalt	3.1	0.60		mg/Kg	2	10/25/2012 11:38:10 PM
Iron	12000	500		mg/Kg	500	11/2/2012 9:14:39 AM
Lead	3.3	0.50		mg/Kg	2	10/25/2012 11:38:10 PM
Manganese	840	2.0		mg/Kg	20	11/2/2012 9:12:14 AM
Nickel	4.7	1.0		mg/Kg	2	10/25/2012 11:38:10 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:38:10 PM
Vanadium	16	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
Zinc	10	5.0		mg/Kg	2	10/25/2012 11:38:10 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Benzoic acid	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:10:00 PM

Lab ID: 1210692-016

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Chloro-3-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
4-Chloroaniline	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 3:55:40 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Di-n-butyl phthalate	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 3:55:40 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 3:55:40 PM
4,6-Dinitro-2-methylphenol	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
2,4-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
2,6-Dinitrotoluene	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Isophorone	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2-Methylphenol	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
3-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
Nitrobenzene	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:10:00 PM

Lab ID: 1210692-016

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 3:55:40 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:55:40 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Pyridine	ND	0.51		mg/Kg	1	10/21/2012 3:55:40 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:55:40 PM
Surr: 2,4,6-Tribromophenol	92.0	21.3-145		%REC	1	10/21/2012 3:55:40 PM
Surr: 2-Fluorobiphenyl	92.8	20-131		%REC	1	10/21/2012 3:55:40 PM
Surr: 2-Fluorophenol	81.3	11.9-130		%REC	1	10/21/2012 3:55:40 PM
Surr: 4-Terphenyl-d14	85.0	25.1-149		%REC	1	10/21/2012 3:55:40 PM
Surr: Nitrobenzene-d5	106	25.6-137		%REC	1	10/21/2012 3:55:40 PM
Surr: Phenol-d5	93.5	20.3-132		%REC	1	10/21/2012 3:55:40 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00109	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Toluene	0.00187	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Ethylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Xylenes, Total	ND	0.00137		mg/Kg	1	10/15/2012 9:01:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,4-Trimethylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,3,5-Trimethylbenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dichloroethane (EDC)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dibromoethane (EDB)	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Naphthalene	ND	0.00137		mg/Kg	1	10/15/2012 9:01:08 PM
1-Methylnaphthalene	ND	0.00274		mg/Kg	1	10/15/2012 9:01:08 PM
2-Methylnaphthalene	ND	0.00274		mg/Kg	1	10/15/2012 9:01:08 PM
Acetone	0.0215	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromodichloromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromoform	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Bromomethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
2-Butanone	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Carbon tetrachloride	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chlorobenzene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chloroethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chloroform	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
Chloromethane	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 PM
2-Chlorotoluene	ND	0.000686		mg/Kg	1	10/15/2012 9:01:08 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:10:00 PM

Lab ID: 1210692-016

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
4-Chlorotoluene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
cis-1,2-DCE	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
cis-1,3-Dichloropropene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dibromo-3-chloropropane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Dibromochloromethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Dibromomethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dichlorobenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,3-Dichlorobenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,4-Dichlorobenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Dichlorodifluoromethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1-Dichloroethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1-Dichloroethene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2-Dichloropropane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,3-Dichloropropane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
2,2-Dichloropropane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1-Dichloropropene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Hexachlorobutadiene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Isopropylbenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
4-Isopropyltoluene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Methylene chloride	ND	0.00206		mg/Kg	1	10/15/2012 9:01:08 PM
n-Butylbenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
2-Hexanone	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
n-Propylbenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
sec-Butylbenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Styrene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
4-Methyl-2-pentanone	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
tert-Butylbenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,1,2-Tetrachloroethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,2,2-Tetrachloroethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Tetrachloroethene (PCE)	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
trans-1,2-DCE	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
trans-1,3-Dichloropropene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,3-Trichlorobenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,4-Trichlorobenzene	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,1-Trichloroethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,1,2-Trichloroethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Trichloroethene (TCE)	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Trichlorofluoromethane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
1,2,3-Trichloropropane	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Vinyl chloride	ND	0.00686		mg/Kg	1	10/15/2012 9:01:08 PM
Surr: 1,2-Dichloroethane-d4	84.9	70-130		%REC	1	10/15/2012 9:01:08 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-30 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:10:00 PM

Lab ID: 1210692-016

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	92.6	70-130		%REC	1	10/15/2012 9:01:08 PM
Surr: Dibromofluoromethane	92.2	70-130		%REC	1	10/15/2012 9:01:08 PM
Surr: Toluene-d8	86.2	70-130		%REC	1	10/15/2012 9:01:08 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 12:16:38 AM
Surr: BFB	87.9	70-130		%REC	1	10/22/2012 12:16:38 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:45:00 PM

Lab ID: 1210692-017

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	10/17/2012 12:09:18 PM
Motor Oil Range Organics (MRO)	72	48		mg/Kg	1	10/17/2012 12:09:18 PM
Surr: DNOP	87.8	77.6-140		%REC	1	10/17/2012 12:09:18 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.083	0.033		mg/kg	1	10/23/2012 5:13:26 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Barium	610	2.0		mg/Kg	20	11/2/2012 9:17:31 AM
Beryllium	0.67	0.30		mg/Kg	2	10/25/2012 11:43:54 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:43:54 PM
Chromium	14	0.60		mg/Kg	2	10/25/2012 11:43:54 PM
Cobalt	3.9	0.60		mg/Kg	2	10/25/2012 11:43:54 PM
Iron	13000	500		mg/Kg	500	11/2/2012 9:19:57 AM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 11:43:54 PM
Manganese	500	2.0		mg/Kg	20	11/2/2012 9:17:31 AM
Nickel	10	1.0		mg/Kg	2	10/25/2012 11:43:54 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:43:54 PM
Vanadium	26	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
Zinc	23	5.0		mg/Kg	2	10/25/2012 11:43:54 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Aniline	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Anthracene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Azobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:45:00 PM

Lab ID: 1210692-017

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/21/2012 4:25:02 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Chrysene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/21/2012 4:25:02 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/21/2012 4:25:02 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Fluorene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Isophorone	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Naphthalene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
3-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:45:00 PM

Lab ID: 1210692-017

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/21/2012 4:25:02 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/21/2012 4:25:02 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Phenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Pyrene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Pyridine	ND	5.0		mg/Kg	1	10/21/2012 4:25:02 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:25:02 PM
Surr: 2,4,6-Tribromophenol	109	21.3-145		%REC	1	10/21/2012 4:25:02 PM
Surr: 2-Fluorobiphenyl	108	20-131		%REC	1	10/21/2012 4:25:02 PM
Surr: 2-Fluorophenol	90.7	11.9-130		%REC	1	10/21/2012 4:25:02 PM
Surr: 4-Terphenyl-d14	129	25.1-149		%REC	1	10/21/2012 4:25:02 PM
Surr: Nitrobenzene-d5	98.4	25.6-137		%REC	1	10/21/2012 4:25:02 PM
Surr: Phenol-d5	101	20.3-132		%REC	1	10/21/2012 4:25:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00226	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Toluene	0.00888	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Ethylbenzene	0.00199	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Xylenes, Total	0.00906	0.00179		mg/Kg	1	10/15/2012 9:31:58 PM
Methyl tert-butyl ether (MTBE)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,4-Trimethylbenzene	0.00341	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,3,5-Trimethylbenzene	0.00139	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dichloroethane (EDC)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dibromoethane (EDB)	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Naphthalene	ND	0.00179		mg/Kg	1	10/15/2012 9:31:58 PM
1-Methylnaphthalene	ND	0.00358		mg/Kg	1	10/15/2012 9:31:58 PM
2-Methylnaphthalene	ND	0.00358		mg/Kg	1	10/15/2012 9:31:58 PM
Acetone	0.0608	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromodichloromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromoform	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Bromomethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
2-Butanone	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Carbon tetrachloride	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chlorobenzene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chloroethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chloroform	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
Chloromethane	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 PM
2-Chlorotoluene	ND	0.000896		mg/Kg	1	10/15/2012 9:31:58 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:45:00 PM

Lab ID: 1210692-017

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Carbon disulfide	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
4-Chlorotoluene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
cis-1,2-DCE	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
cis-1,3-Dichloropropene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dibromo-3-chloropropane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Dibromochloromethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Dibromomethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dichlorobenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,3-Dichlorobenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,4-Dichlorobenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Dichlorodifluoromethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1-Dichloroethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1-Dichloroethene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2-Dichloropropane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,3-Dichloropropane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
2,2-Dichloropropane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1-Dichloropropene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Hexachlorobutadiene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Isopropylbenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
4-Isopropyltoluene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Methylene chloride	ND	0.00269		mg/Kg	1	10/15/2012 9:31:58 PM
n-Butylbenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
2-Hexanone	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
n-Propylbenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
sec-Butylbenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Styrene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
4-Methyl-2-pentanone	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
tert-Butylbenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,1,2-Tetrachloroethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,2,2-Tetrachloroethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Tetrachloroethene (PCE)	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
trans-1,2-DCE	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
trans-1,3-Dichloropropene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,3-Trichlorobenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,4-Trichlorobenzene	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,1-Trichloroethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,1,2-Trichloroethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Trichloroethene (TCE)	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Trichlorofluoromethane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
1,2,3-Trichloropropane	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Vinyl chloride	ND	0.00896		mg/Kg	1	10/15/2012 9:31:58 PM
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%REC	1	10/15/2012 9:31:58 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 12:45:00 PM

Lab ID: 1210692-017

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Surr: 4-Bromofluorobenzene	118	70-130		%REC	1	10/15/2012 9:31:58 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/15/2012 9:31:58 PM
Surr: Toluene-d8	99.8	70-130		%REC	1	10/15/2012 9:31:58 PM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 12:45:20 AM
Surr: BFB	92.0	70-130		%REC	1	10/22/2012 12:45:20 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:00:00 PM

Lab ID: 1210692-018

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	15	10		mg/Kg	1	10/17/2012 12:30:54 PM
Motor Oil Range Organics (MRO)	130	51		mg/Kg	1	10/17/2012 12:30:54 PM
Surr: DNOP	91.2	77.6-140		%REC	1	10/17/2012 12:30:54 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	24	5.0		mg/Kg	1	10/22/2012 1:28:54 AM
Surr: BFB	108	84-116		%REC	1	10/22/2012 1:28:54 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.056	0.033		mg/kg	1	10/23/2012 5:18:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Barium	1200	5.0		mg/Kg	50	11/2/2012 10:14:10 AM
Beryllium	0.46	0.30		mg/Kg	2	10/25/2012 11:49:40 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:49:40 PM
Chromium	11	0.60		mg/Kg	2	10/25/2012 11:49:40 PM
Cobalt	3.4	0.60		mg/Kg	2	10/25/2012 11:49:40 PM
Iron	10000	500		mg/Kg	500	11/2/2012 9:25:14 AM
Lead	2.3	0.50		mg/Kg	2	10/25/2012 11:49:40 PM
Manganese	820	2.0		mg/Kg	20	11/2/2012 9:22:48 AM
Nickel	9.0	1.0		mg/Kg	2	10/25/2012 11:49:40 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:49:40 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
Zinc	22	5.0		mg/Kg	2	10/25/2012 11:49:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Aniline	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Anthracene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Azobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:00:00 PM

Lab ID: 1210692-018

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 4:54:19 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Carbazole	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/21/2012 4:54:19 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Chrysene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/21/2012 4:54:19 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/21/2012 4:54:19 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Fluorene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Isophorone	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Naphthalene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:00:00 PM

Lab ID: 1210692-018

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/21/2012 4:54:19 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/21/2012 4:54:19 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Phenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Pyrene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Pyridine	ND	2.5		mg/Kg	1	10/21/2012 4:54:19 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/21/2012 4:54:19 PM
Surr: 2,4,6-Tribromophenol	84.3	21.3-145		%REC	1	10/21/2012 4:54:19 PM
Surr: 2-Fluorobiphenyl	82.3	20-131		%REC	1	10/21/2012 4:54:19 PM
Surr: 2-Fluorophenol	76.3	11.9-130		%REC	1	10/21/2012 4:54:19 PM
Surr: 4-Terphenyl-d14	94.7	25.1-149		%REC	1	10/21/2012 4:54:19 PM
Surr: Nitrobenzene-d5	84.6	25.6-137		%REC	1	10/21/2012 4:54:19 PM
Surr: Phenol-d5	81.4	20.3-132		%REC	1	10/21/2012 4:54:19 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00134	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Toluene	0.00572	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Ethylbenzene	0.00141	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Xylenes, Total	0.00512	0.00136		mg/Kg	1	10/16/2012 1:59:01 PM
Methyl tert-butyl ether (MTBE)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2,4-Trimethylbenzene	0.00197	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,3,5-Trimethylbenzene	0.000762	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dichloroethane (EDC)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dibromoethane (EDB)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Naphthalene	ND	0.00136		mg/Kg	1	10/16/2012 1:59:01 PM
1-Methylnaphthalene	ND	0.00272		mg/Kg	1	10/16/2012 1:59:01 PM
2-Methylnaphthalene	ND	0.00272		mg/Kg	1	10/16/2012 1:59:01 PM
Acetone	0.0525	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromodichloromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromoform	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Bromomethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2-Butanone	ND	0.00680		mg/Kg	1	10/16/2012 1:59:01 PM
Carbon tetrachloride	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Chlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Chloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:00:00 PM

Lab ID: 1210692-018

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Chloromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2-Chlorotoluene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Carbon disulfide	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
4-Chlorotoluene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
cis-1,2-DCE	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
cis-1,3-Dichloropropene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dibromo-3-chloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Dibromochloromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Dibromomethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,3-Dichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,4-Dichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Dichlorodifluoromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1-Dichloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1-Dichloroethene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2-Dichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,3-Dichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2,2-Dichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1-Dichloropropene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Hexachlorobutadiene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Isopropylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
4-Isopropyltoluene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Methylene chloride	ND	0.00204		mg/Kg	1	10/16/2012 1:59:01 PM
n-Butylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
2-Hexanone	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
n-Propylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
sec-Butylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Styrene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
4-Methyl-2-pentanone	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
tert-Butylbenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,1,2-Tetrachloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,2,2-Tetrachloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Tetrachloroethene (PCE)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
trans-1,2-DCE	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
trans-1,3-Dichloropropene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2,3-Trichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,2,4-Trichlorobenzene	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,1-Trichloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
1,1,2-Trichloroethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Trichloroethene (TCE)	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Trichlorofluoromethane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:00:00 PM

Lab ID: 1210692-018

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Vinyl chloride	ND	0.000680		mg/Kg	1	10/16/2012 1:59:01 PM
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%REC	1	10/16/2012 1:59:01 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/16/2012 1:59:01 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/16/2012 1:59:01 PM
Surr: Toluene-d8	108	70-130		%REC	1	10/16/2012 1:59:01 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:10:00 PM

Lab ID: 1210692-019

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 5:53:12 PM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/16/2012 5:53:12 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/16/2012 5:53:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 1:57:42 AM
Surr: BFB	94.8	84-116		%REC	1	10/22/2012 1:57:42 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:20:30 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Barium	440	2.0		mg/Kg	20	11/2/2012 9:28:08 AM
Beryllium	0.67	0.30		mg/Kg	2	10/25/2012 11:57:27 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:57:27 PM
Chromium	9.8	0.60		mg/Kg	2	10/25/2012 11:57:27 PM
Cobalt	3.6	0.60		mg/Kg	2	10/25/2012 11:57:27 PM
Iron	16000	500		mg/Kg	500	11/2/2012 9:32:13 AM
Lead	3.3	0.50		mg/Kg	2	10/25/2012 11:57:27 PM
Manganese	770	2.0		mg/Kg	20	11/2/2012 9:28:08 AM
Nickel	6.2	1.0		mg/Kg	2	10/25/2012 11:57:27 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 11:57:27 PM
Vanadium	25	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 11:57:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:10:00 PM

Lab ID: 1210692-019

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 5:23:35 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 5:23:35 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 5:23:35 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 5:23:35 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:10:00 PM

Lab ID: 1210692-019

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 5:23:35 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 5:23:35 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 5:23:35 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 5:23:35 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 5:23:35 PM
Surr: 2,4,6-Tribromophenol	89.2	21.3-145		%REC	1	10/21/2012 5:23:35 PM
Surr: 2-Fluorobiphenyl	87.2	20-131		%REC	1	10/21/2012 5:23:35 PM
Surr: 2-Fluorophenol	84.6	11.9-130		%REC	1	10/21/2012 5:23:35 PM
Surr: 4-Terphenyl-d14	84.6	25.1-149		%REC	1	10/21/2012 5:23:35 PM
Surr: Nitrobenzene-d5	94.5	25.6-137		%REC	1	10/21/2012 5:23:35 PM
Surr: Phenol-d5	88.8	20.3-132		%REC	1	10/21/2012 5:23:35 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00202	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Toluene	0.00423	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Ethylbenzene	0.00107	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Xylenes, Total	0.00434	0.00140		mg/Kg	1	10/15/2012 10:33:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2,4-Trimethylbenzene	0.00177	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,3,5-Trimethylbenzene	0.000722	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dichloroethane (EDC)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dibromoethane (EDB)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Naphthalene	ND	0.00140		mg/Kg	1	10/15/2012 10:33:34 PM
1-Methylnaphthalene	ND	0.00280		mg/Kg	1	10/15/2012 10:33:34 PM
2-Methylnaphthalene	ND	0.00280		mg/Kg	1	10/15/2012 10:33:34 PM
Acetone	0.0381	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromodichloromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromoform	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Bromomethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2-Butanone	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
Carbon tetrachloride	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Chlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Chloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:10:00 PM

Lab ID: 1210692-019

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Chloromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2-Chlorotoluene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Carbon disulfide	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
4-Chlorotoluene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
cis-1,2-DCE	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
cis-1,3-Dichloropropene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dibromo-3-chloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Dibromochloromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Dibromomethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,3-Dichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,4-Dichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Dichlorodifluoromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1-Dichloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1-Dichloroethene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2-Dichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,3-Dichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2,2-Dichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1-Dichloropropene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Hexachlorobutadiene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Isopropylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
4-Isopropyltoluene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Methylene chloride	ND	0.00210		mg/Kg	1	10/15/2012 10:33:34 PM
n-Butylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
2-Hexanone	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
n-Propylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
sec-Butylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Styrene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
4-Methyl-2-pentanone	ND	0.00701		mg/Kg	1	10/15/2012 10:33:34 PM
tert-Butylbenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,1,2-Tetrachloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,2,2-Tetrachloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Tetrachloroethene (PCE)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
trans-1,2-DCE	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
trans-1,3-Dichloropropene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2,3-Trichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,2,4-Trichlorobenzene	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,1-Trichloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
1,1,2-Trichloroethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Trichloroethene (TCE)	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Trichlorofluoromethane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-35 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 1:10:00 PM

Lab ID: 1210692-019

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Vinyl chloride	ND	0.000701		mg/Kg	1	10/15/2012 10:33:34 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	1	10/15/2012 10:33:34 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/15/2012 10:33:34 PM
Surr: Dibromofluoromethane	110	70-130		%REC	1	10/15/2012 10:33:34 PM
Surr: Toluene-d8	95.2	70-130		%REC	1	10/15/2012 10:33:34 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210692-020

Matrix: MEOH (SOIL)

Received Date: 10/13/2012 8:30:00 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	10/22/2012 2:26:31 AM
Surr: BFB	96.1	84-116		%REC	1	10/22/2012 2:26:31 AM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Toluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Ethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Naphthalene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 4:17:22 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/16/2012 4:17:22 AM
Acetone	ND	0.75		mg/Kg	1	10/16/2012 4:17:22 AM
Bromobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Bromoform	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Bromomethane	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
2-Butanone	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Carbon disulfide	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Chlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Chloroethane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Chloroform	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Chloromethane	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Dibromomethane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210692-020

Matrix: MEOH (SOIL)

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: DJF
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
2-Hexanone	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/16/2012 4:17:22 AM
Methylene chloride	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/16/2012 4:17:22 AM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Styrene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Vinyl chloride	ND	0.050		mg/Kg	1	10/16/2012 4:17:22 AM
Xylenes, Total	ND	0.10		mg/Kg	1	10/16/2012 4:17:22 AM
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	10/16/2012 4:17:22 AM
Surr: 4-Bromofluorobenzene	91.0	70-130		%REC	1	10/16/2012 4:17:22 AM
Surr: Dibromofluoromethane	89.3	70-130		%REC	1	10/16/2012 4:17:22 AM
Surr: Toluene-d8	97.8	70-130		%REC	1	10/16/2012 4:17:22 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:05:00 PM

Lab ID: 1210692-021

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	77	10		mg/Kg	1	10/16/2012 6:18:20 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 6:18:20 PM
Surr: DNOP	105	77.6-140		%REC	1	10/16/2012 6:18:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 2:55:20 AM
Surr: BFB	94.8	84-116		%REC	1	10/22/2012 2:55:20 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.12	0.033		mg/kg	1	10/23/2012 5:29:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Arsenic	ND	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Barium	600	2.0		mg/Kg	20	11/2/2012 9:35:04 AM
Beryllium	0.56	0.30		mg/Kg	2	10/26/2012 12:11:53 AM
Cadmium	ND	0.20		mg/Kg	2	10/26/2012 12:11:53 AM
Chromium	11	0.60		mg/Kg	2	10/26/2012 12:11:53 AM
Cobalt	3.6	0.60		mg/Kg	2	10/26/2012 12:11:53 AM
Iron	13000	500		mg/Kg	500	11/2/2012 9:37:29 AM
Lead	3.5	0.50		mg/Kg	2	10/26/2012 12:11:53 AM
Manganese	590	2.0		mg/Kg	20	11/2/2012 9:35:04 AM
Nickel	6.3	1.0		mg/Kg	2	10/26/2012 12:11:53 AM
Selenium	ND	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Silver	ND	0.50		mg/Kg	2	10/26/2012 12:11:53 AM
Vanadium	18	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
Zinc	30	5.0		mg/Kg	2	10/26/2012 12:11:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:05:00 PM

Lab ID: 1210692-021

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 10:37:40 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 10:37:40 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 10:37:40 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 10:37:40 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:05:00 PM

Lab ID: 1210692-021

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 10:37:40 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 10:37:40 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 10:37:40 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 10:37:40 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 10:37:40 PM
Surr: 2,4,6-Tribromophenol	92.5	21.3-145		%REC	1	10/21/2012 10:37:40 PM
Surr: 2-Fluorobiphenyl	90.8	20-131		%REC	1	10/21/2012 10:37:40 PM
Surr: 2-Fluorophenol	83.2	11.9-130		%REC	1	10/21/2012 10:37:40 PM
Surr: 4-Terphenyl-d14	77.4	25.1-149		%REC	1	10/21/2012 10:37:40 PM
Surr: Nitrobenzene-d5	97.0	25.6-137		%REC	1	10/21/2012 10:37:40 PM
Surr: Phenol-d5	81.4	20.3-132		%REC	1	10/21/2012 10:37:40 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00154	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Toluene	0.00597	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Ethylbenzene	0.00224	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Xylenes, Total	0.0112	0.00221		mg/Kg	1	10/16/2012 2:29:51 PM
Methyl tert-butyl ether (MTBE)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2,4-Trimethylbenzene	0.00310	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,3,5-Trimethylbenzene	0.00111	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dichloroethane (EDC)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dibromoethane (EDB)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Naphthalene	ND	0.00221		mg/Kg	1	10/16/2012 2:29:51 PM
1-Methylnaphthalene	ND	0.00441		mg/Kg	1	10/16/2012 2:29:51 PM
2-Methylnaphthalene	ND	0.00441		mg/Kg	1	10/16/2012 2:29:51 PM
Acetone	0.128	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromodichloromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromoform	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Bromomethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2-Butanone	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
Carbon tetrachloride	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Chlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Chloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
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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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:05:00 PM

Lab ID: 1210692-021

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Chloromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2-Chlorotoluene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Carbon disulfide	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
4-Chlorotoluene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
cis-1,2-DCE	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
cis-1,3-Dichloropropene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dibromo-3-chloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Dibromochloromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Dibromomethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,3-Dichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,4-Dichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Dichlorodifluoromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1-Dichloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1-Dichloroethene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2-Dichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,3-Dichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2,2-Dichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1-Dichloropropene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Hexachlorobutadiene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Isopropylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
4-Isopropyltoluene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Methylene chloride	ND	0.00331		mg/Kg	1	10/16/2012 2:29:51 PM
n-Butylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
2-Hexanone	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
n-Propylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
sec-Butylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Styrene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
4-Methyl-2-pentanone	ND	0.0110		mg/Kg	1	10/16/2012 2:29:51 PM
tert-Butylbenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,1,2-Tetrachloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,2,2-Tetrachloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Tetrachloroethene (PCE)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
trans-1,2-DCE	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
trans-1,3-Dichloropropene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2,3-Trichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,2,4-Trichlorobenzene	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,1-Trichloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
1,1,2-Trichloroethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Trichloroethene (TCE)	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Trichlorofluoromethane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:05:00 PM

Lab ID: 1210692-021

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Vinyl chloride	ND	0.00110		mg/Kg	1	10/16/2012 2:29:51 PM
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%REC	1	10/16/2012 2:29:51 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/16/2012 2:29:51 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/16/2012 2:29:51 PM
Surr: Toluene-d8	101	70-130		%REC	1	10/16/2012 2:29:51 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:25:00 PM

Lab ID: 1210692-022

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	16	10		mg/Kg	1	10/16/2012 7:08:35 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/16/2012 7:08:35 PM
Surr: DNOP	92.8	77.6-140		%REC	1	10/16/2012 7:08:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 3:24:06 AM
Surr: BFB	97.9	84-116		%REC	1	10/22/2012 3:24:06 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:31:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Barium	310	1.0		mg/Kg	10	11/2/2012 2:53:36 PM
Beryllium	0.74	0.30		mg/Kg	2	11/2/2012 10:27:47 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:27:47 AM
Chromium	7.1	0.60		mg/Kg	2	11/2/2012 10:27:47 AM
Cobalt	3.8	0.60		mg/Kg	2	11/2/2012 10:27:47 AM
Iron	10000	500		mg/Kg	500	11/2/2012 2:56:03 PM
Lead	3.7	0.50		mg/Kg	2	11/2/2012 10:27:47 AM
Manganese	510	2.0		mg/Kg	20	11/2/2012 3:30:43 PM
Nickel	6.1	1.0		mg/Kg	2	11/2/2012 10:27:47 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:27:47 AM
Vanadium	15	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
Zinc	13	5.0		mg/Kg	2	11/2/2012 10:27:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Aniline	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Azobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:25:00 PM

Lab ID: 1210692-022

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 11:06:55 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Carbazole	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/21/2012 11:06:55 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Chrysene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/21/2012 11:06:55 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/21/2012 11:06:55 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Fluorene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Isophorone	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Naphthalene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:25:00 PM

Lab ID: 1210692-022

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 11:06:55 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/21/2012 11:06:55 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/21/2012 11:06:55 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Phenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Pyrene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Pyridine	ND	1.0		mg/Kg	1	10/21/2012 11:06:55 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 11:06:55 PM
Surr: 2,4,6-Tribromophenol	93.5	21.3-145		%REC	1	10/21/2012 11:06:55 PM
Surr: 2-Fluorobiphenyl	98.3	20-131		%REC	1	10/21/2012 11:06:55 PM
Surr: 2-Fluorophenol	86.2	11.9-130		%REC	1	10/21/2012 11:06:55 PM
Surr: 4-Terphenyl-d14	88.1	25.1-149		%REC	1	10/21/2012 11:06:55 PM
Surr: Nitrobenzene-d5	103	25.6-137		%REC	1	10/21/2012 11:06:55 PM
Surr: Phenol-d5	90.5	20.3-132		%REC	1	10/21/2012 11:06:55 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00142	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Toluene	0.00586	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Ethylbenzene	0.00134	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Xylenes, Total	0.00573	0.00165		mg/Kg	1	10/16/2012 3:00:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2,4-Trimethylbenzene	0.00263	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,3,5-Trimethylbenzene	0.00102	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dichloroethane (EDC)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dibromoethane (EDB)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/16/2012 3:00:38 PM
1-Methylnaphthalene	ND	0.00329		mg/Kg	1	10/16/2012 3:00:38 PM
2-Methylnaphthalene	ND	0.00329		mg/Kg	1	10/16/2012 3:00:38 PM
Acetone	0.0479	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromodichloromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromoform	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Bromomethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2-Butanone	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
Carbon tetrachloride	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Chlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Chloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:25:00 PM

Lab ID: 1210692-022

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Chloromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2-Chlorotoluene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Carbon disulfide	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
4-Chlorotoluene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
cis-1,2-DCE	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
cis-1,3-Dichloropropene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dibromo-3-chloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Dibromochloromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Dibromomethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,3-Dichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,4-Dichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Dichlorodifluoromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1-Dichloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1-Dichloroethene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2-Dichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,3-Dichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2,2-Dichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1-Dichloropropene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Hexachlorobutadiene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Isopropylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
4-Isopropyltoluene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Methylene chloride	ND	0.00247		mg/Kg	1	10/16/2012 3:00:38 PM
n-Butylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
2-Hexanone	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
n-Propylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
sec-Butylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Styrene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
4-Methyl-2-pentanone	ND	0.00823		mg/Kg	1	10/16/2012 3:00:38 PM
tert-Butylbenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,1,2-Tetrachloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,2,2-Tetrachloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Tetrachloroethene (PCE)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
trans-1,2-DCE	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
trans-1,3-Dichloropropene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2,3-Trichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,2,4-Trichlorobenzene	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,1-Trichloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
1,1,2-Trichloroethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Trichloroethene (TCE)	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Trichlorofluoromethane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:25:00 PM

Lab ID: 1210692-022

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Vinyl chloride	ND	0.000823		mg/Kg	1	10/16/2012 3:00:38 PM
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	10/16/2012 3:00:38 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/16/2012 3:00:38 PM
Surr: Dibromofluoromethane	94.1	70-130		%REC	1	10/16/2012 3:00:38 PM
Surr: Toluene-d8	86.1	70-130		%REC	1	10/16/2012 3:00:38 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (2-4')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:35:00 PM

Lab ID: 1210692-023

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 11:38:39 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/16/2012 11:38:39 AM
Surr: DNOP	97.8	77.6-140		%REC	1	10/16/2012 11:38:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 3:52:51 AM
Surr: BFB	98.3	84-116		%REC	1	10/22/2012 3:52:51 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.17	0.033		mg/kg	1	10/23/2012 5:33:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Barium	250	1.0		mg/Kg	10	11/2/2012 3:00:37 PM
Beryllium	0.60	0.30		mg/Kg	2	11/2/2012 10:30:13 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:30:13 AM
Chromium	22	0.60		mg/Kg	2	11/2/2012 10:30:13 AM
Cobalt	4.3	0.60		mg/Kg	2	11/2/2012 10:30:13 AM
Iron	11000	500		mg/Kg	500	11/2/2012 3:03:01 PM
Lead	4.2	0.50		mg/Kg	2	11/2/2012 10:30:13 AM
Manganese	250	1.0		mg/Kg	10	11/2/2012 3:00:37 PM
Nickel	7.0	1.0		mg/Kg	2	11/2/2012 10:30:13 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:30:13 AM
Vanadium	18	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
Zinc	29	5.0		mg/Kg	2	11/2/2012 10:30:13 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (2-4')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:35:00 PM

Lab ID: 1210692-023

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 3:54:54 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 3:54:54 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 3:54:54 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 3:54:54 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (2-4')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:35:00 PM

Lab ID: 1210692-023

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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 3:54:54 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 3:54:54 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 3:54:54 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 3:54:54 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 3:54:54 AM
Surr: 2,4,6-Tribromophenol	102	21.3-145		%REC	1	10/21/2012 3:54:54 AM
Surr: 2-Fluorobiphenyl	89.8	20-131		%REC	1	10/21/2012 3:54:54 AM
Surr: 2-Fluorophenol	88.3	11.9-130		%REC	1	10/21/2012 3:54:54 AM
Surr: 4-Terphenyl-d14	83.4	25.1-149		%REC	1	10/21/2012 3:54:54 AM
Surr: Nitrobenzene-d5	93.8	25.6-137		%REC	1	10/21/2012 3:54:54 AM
Surr: Phenol-d5	92.4	20.3-132		%REC	1	10/21/2012 3:54:54 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Toluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Ethylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Xylenes, Total	ND	0.00224		mg/Kg	1	10/16/2012 3:31:30 PM
Methyl tert-butyl ether (MTBE)	0.0199	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2,4-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,3,5-Trimethylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dichloroethane (EDC)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dibromoethane (EDB)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Naphthalene	ND	0.00224		mg/Kg	1	10/16/2012 3:31:30 PM
1-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/16/2012 3:31:30 PM
2-Methylnaphthalene	ND	0.00448		mg/Kg	1	10/16/2012 3:31:30 PM
Acetone	0.0716	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromodichloromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromoform	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Bromomethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2-Butanone	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
Carbon tetrachloride	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Chlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Chloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (2-4')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:35:00 PM

Lab ID: 1210692-023

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Chloromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2-Chlorotoluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Carbon disulfide	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
4-Chlorotoluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
cis-1,2-DCE	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
cis-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dibromo-3-chloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Dibromochloromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Dibromomethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,3-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,4-Dichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Dichlorodifluoromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1-Dichloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1-Dichloroethene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,3-Dichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2,2-Dichloropropane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1-Dichloropropene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Hexachlorobutadiene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Isopropylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
4-Isopropyltoluene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Methylene chloride	ND	0.00336		mg/Kg	1	10/16/2012 3:31:30 PM
n-Butylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
2-Hexanone	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
n-Propylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
sec-Butylbenzene	0.00128	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Styrene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
4-Methyl-2-pentanone	ND	0.0112		mg/Kg	1	10/16/2012 3:31:30 PM
tert-Butylbenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,1,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,2,2-Tetrachloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Tetrachloroethene (PCE)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
trans-1,2-DCE	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
trans-1,3-Dichloropropene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2,3-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,2,4-Trichlorobenzene	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,1-Trichloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
1,1,2-Trichloroethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Trichloroethene (TCE)	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Trichlorofluoromethane	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (2-4')

Project: SWMU NO.1

Collection Date: 10/12/2012 2:35:00 PM

Lab ID: 1210692-023

Matrix: SOIL

Received Date: 10/13/2012 8:30:00 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	10/16/2012 3:31:30 PM
Vinyl chloride	ND	0.00112		mg/Kg	1	10/16/2012 3:31:30 PM
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%REC	1	10/16/2012 3:31:30 PM
Surr: 4-Bromofluorobenzene	128	70-130		%REC	1	10/16/2012 3:31:30 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/16/2012 3:31:30 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/16/2012 3:31:30 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