

AP - 111

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

Investigation Report (6)

August 2015

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.
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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

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
Mercury	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	

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QC SUMMARY REPORT

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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	

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QC SUMMARY REPORT

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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

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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			

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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:

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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	

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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	

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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			

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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:

* 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
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	Ics-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	Icsd-4189		SampType: LCSD		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	
Mercury	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: Ics		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:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 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:

* 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-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:

* 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: 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
(<2 or >12 unless noted)
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:		Date	Time		
10/6/12	0815	[Signature]		[Signature]		10/6/12	0815		
Date:	Time:	Relinquished by:		Received by:		Date	Time		

Turn-Around Time:			
☒ Standard		☐ Rush	
Project Name: <u>SWMU No.1</u>			
Project #: _____			
Project Manager: _____			
<u>SCOTT CROUCH-RPS</u> Sampler: <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: <u>[Signature]</u>		Date	Time
		10/6/12	0815
Received by: _____		Date	Time

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 <u>EXCEL</u>				
Date	Time	Matrix	Sample Request ID	
10/5/12	1020	SOIL	SWMU 1-8 (4-6')	
	1030		SWMU 1-8 (10-12')	
	1040		SWMU 1-8 (12-14')	
	1110		SWMU 1-8 (16-18')	
Date:	Time:	Relinquished by:		
10/6/12	0815			
Date:	Time:	Relinquished by:		



**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		
Container Type and #	Preservative Type	HEAL No.
2 VIALS	SOBI	1210372
2 VIALS	MEOH	
3 JARS	—	
2 VIALS	SOBI	-004
2 VIALS	MEOH	-007
1 JAR	—	
2 VIALS	SOBI	-008
2 VIALS	MEOH	
3 JARS	—	
2 VIALS	SOBI	-009
2 VIALS	MEOH	
3 JARS	—	
Received by:  Date: 10/6/12 0815		
Received by: _____ Date: _____		

Phone #: 505-722-0217	QA/QC Package:	
email or Fax#: SCOTT CROUCH-RPS	☒ Standard ☐ Level 4 (Full Validation) ☐ NELAP ☐ Other	
Accreditation		
☒ EDD (Type) EXCEL		
Date	Time	Matrix
10/5/12	1020	SOIL SWMU 1-8 (4-6')
	1030	SWMU 1-8 (10-12')
	1040	SWMU 1-8 (12-14')
	1110	SWMU 1-8 (16-18')
Date:	Time:	Relinquished by:
10/6/12	0815	ST-7
Date:	Time:	Relinquished by:

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.

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

19/4/12 1440 SOIL SWMU 1-7(16-18)

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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 #

2 VIALS

3 JARS

Preservative Type

MEOH

HEAL No.

1210372

HEAL No.

-015

TPH 8015B (GRO / DRO / MRO)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA) + TPH GRO

8270 (Semi-VOA)

TPH MRO & DRO

METALS

Air Bubbles (Y or N)

Remarks:

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

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

Date: 10/6/12 Time: 0815

Relinquished by: [Signature]

Date: 10/6/12 Time: 0815

Relinquished by: [Signature]

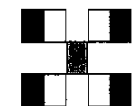
Date: 10/6/12 Time: 0815

Relinquished by: [Signature]

Date: 10/6/12 Time: 0815

Relinquished by: [Signature]

Date: 10/6/12 Time: 0815



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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 noted on the analytical report.

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
 Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
 Phone #: 505-722-0217
 email or Fax#: SCOTT CROUCH-RPS

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
 Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Date	Time	Matrix	Sample Request ID
10/4/12	1145	SOIL	SWMU 1-6 (10-11')
			↓
			↓
	1155		SWMU 1-6 (11-12')
			↓
			↓
	1355		SWMU 1-7 (12-14')
			↓
			↓
	1415		SWMU 1-7 (14-16')
			↓
			↓

Date: 10/6/12 Time: 0815
 Relinquished by: [Signature]
 Date: 10/6/12 Time: 0815
 Relinquished by: [Signature]

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°C

Container Type and #
 Preservative Type
 HEAL No.
1210372

2 VIALS	SOBI	-016
2 VIALS	MEOH	
2 JARS	-	
2 VIALS	SOBI	-017
2 VIALS	MEOH	
3 JARS	-	
2 VIALS	SOBI	-018
2 VIALS	MEOH	
3 JARS	-	
2 VIALS	SOBI	-019
2 VIALS	MEOH	
3 JARS	-	

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



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

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

Remarks:

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	S0B1	-020
2 VIALS	MEOH	
1 JAR	-	
2 VIALS	S0B1	-021
2 VIALS	MEOH	
1 JAR	-	
2 VIALS	S0B1	-022
2 VIALS	MEOH	
2 JARS	-	
2 VIALS	S0B1	-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

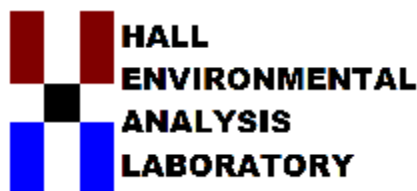


4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107
www.hallenvironmental.com

Analysis Request

[illegible][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:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

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

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Anatek Labs, Inc.

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

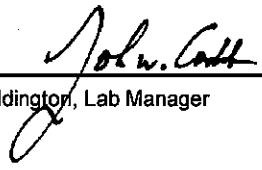
Batch #: 121011049
Project Name: 1210521

Analytical Results Report

Sample Number	121011049-007	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
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			

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	
Silver	4.5	1.2	4.960	0	91.3	75	125	0.532	20	SR
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			

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
 Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
 Phone #: 505-722-0217
 email or Fax#: SCOTT CROUCH -RPS

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
 Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Date	Time	Matrix	Sample Request ID
10/8/12	1605	SOIL	SWMU 1-24 (0-0.5')
			↓
			SWMU 1-24 (0-0.5')
			↓
			SWMU 1-24 (1.5-2')
			↓
			SWMU 1-24 (10.5-11.5')
			↓
			↓

Date: 10/9/12 Time: 0700
 Relinquished by: [Signature]
 Date: 10/10/12 Time: 0800
 Relinquished by: [Signature]

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

SWMU No. 1

Project #:

Project Manager:

SCOTT CROUCH -RPS

Sampler: TRACY PAYNE -RPS

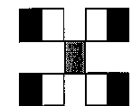
On Ice: ☒ Yes ☐ No

Sample Temperature: 12

Container Type and #
 Preservative Type
 HEAL No.
1210521

10/8/12	1605	SOIL	SWMU 1-24 (0-0.5')	2 VIALS	SOBI	-001
			↓	2 VIALS	MEOH	
			↓	3 JARS	-	
			SWMU 1-24 (0-0.5')	2 VIALS	SOBI	-002
			↓	2 VIALS	MEOH	
			↓	3 JARS	-	
			SWMU 1-24 (1.5-2')	2 VIALS	SOBI	-003
			↓	2 VIALS	MEOH	
			↓	3 JARS	-	
			SWMU 1-24 (10.5-11.5')	2 VIALS	SOBI	-004
			↓	2 VIALS	MEOH	
			↓	3 JARS	-	

Received by: [Signature] Date: 10/10/12 Time: 0800
 Received by: [Signature] Date: 10/10/12 Time: 0800



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

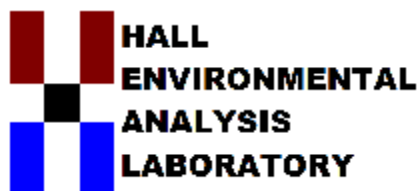
Analysis Request

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

Remarks:

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.
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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
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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 (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

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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
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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 (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

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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
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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 (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

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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 (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

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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
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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 (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

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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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- 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:

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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
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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:

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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 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:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Qualifiers:

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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:

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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
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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 (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:

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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 (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	

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

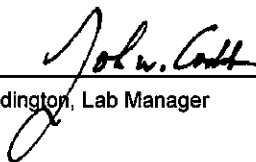
Batch #: 121017006
Project Name: 1210653

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			

Chain-of-Custody Record

Client: WESTERN REFINING SW INC
GALLUP REFINERY
 Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
 Phone #: 505-722-0217
 email or Fax#: SCOTT CROUCH - RPS

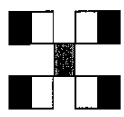
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
 Accreditation
☐ NELAP ☐ Other
☒ EDD (Type) EXCEL

Turn-Around Time: ☒ Standard ☐ Rush
 Project Name: SWMU No. 1
 Project #: SCOTT CROUCH - RPS
 Project Manager: SAMPLER: TRACY PAYNE - RPS

On Ice: ☒ Yes ☐ No
 Sample Temperature: 1.0
 Container Type and #
 Preservative Type
 HEAL No. 1210153

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
10/10/12	1700	Soil	SWMU 1-37 (0-0.5')	2 VIALS	SOBI	-001
				2 VIALS	MEOH	
				3 JARS	-	
1715			SWMU 1-37 (1.5-2')	2 VIALS	SOBI	-002
				2 VIALS	MEOH	
				2 JARS	-	
1730			SWMU 1-37 (8-8.5')	2 VIALS	SOBI	-003
				2 VIALS	MEOH	
				3 JARS	-	
1740			SWMU 1-37 (8.5-9')	2 VIALS	SOBI	-004
				2 VIALS	MEOH	
				2 JARS	-	

Date: 10/11/12 Time: 0735 Relinquished by: 517
 Date: 10/11/12 Time: 0800 Relinquished by: Michael Payne



HALL ENVIRONMENTAL ANALYSIS LABORATORY

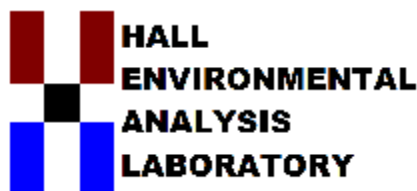
www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

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

Remarks:

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

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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 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

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- 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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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

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Analytical Report

Lab Order 1210660

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CLIENT: Western Refining Southwest, Gallup

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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

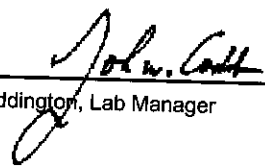
Analytical Results Report

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
Mercurv	ND	0.00020								

Sample ID	LCS-4503		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186276		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120			

Sample ID	1210675-003BMS		SampType: ms		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186299		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	83.0	75	125			

Sample ID	1210675-003BMSD		SampType: msd		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186300		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0040	0.00020	0.005000	0	80.1	75	125	3.62	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
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:

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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	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 $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☒
10. Was preservative added to bottles? Yes ☒ No ☒ NA ☐
11. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH: 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: _____

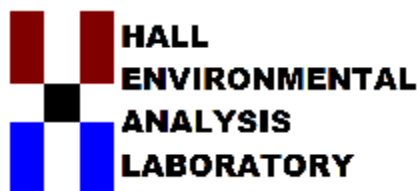
18. Additional remarks:

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	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
cis-1,2-DCE	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
cis-1,3-Dichloropropene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dibromo-3-chloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Dibromochloromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Dibromomethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3-Dichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,4-Dichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Dichlorodifluoromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloroethene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2-Dichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,3-Dichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
2,2-Dichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1-Dichloropropene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Hexachlorobutadiene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Isopropylbenzene	0.00210	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
4-Isopropyltoluene	ND	0.000810		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	0.000810		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	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
sec-Butylbenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Styrene	ND	0.000810		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	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,1,2-Tetrachloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,2,2-Tetrachloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Tetrachloroethene (PCE)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
trans-1,2-DCE	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
trans-1,3-Dichloropropene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,3-Trichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,4-Trichlorobenzene	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,1-Trichloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,1,2-Trichloroethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Trichloroethene (TCE)	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Trichlorofluoromethane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
1,2,3-Trichloropropane	ND	0.000810		mg/Kg	1	10/15/2012 1:49:48 PM
Vinyl chloride	ND	0.000810		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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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
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
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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:

* 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 (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:

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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 1-38 (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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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

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

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- P Sample pH greater than 2
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- 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

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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 1-28 (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
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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 1-28 (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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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the 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:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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

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 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-024

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 12:03:32 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/16/2012 12:03:32 PM
Surr: DNOP	99.1	77.6-140		%REC	1	10/16/2012 12:03:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 4:21:35 AM
Surr: BFB	95.4	84-116		%REC	1	10/22/2012 4:21:35 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:34:52 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Barium	120	1.0		mg/Kg	10	11/2/2012 3:05:52 PM
Beryllium	0.71	0.30		mg/Kg	2	11/2/2012 10:32:38 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:32:38 AM
Chromium	7.8	0.60		mg/Kg	2	11/2/2012 10:32:38 AM
Cobalt	4.1	0.60		mg/Kg	2	11/2/2012 10:32:38 AM
Iron	11000	500		mg/Kg	500	11/2/2012 3:08:17 PM
Lead	2.5	0.50		mg/Kg	2	11/2/2012 10:32:38 AM
Manganese	320	1.0		mg/Kg	10	11/2/2012 3:05:52 PM
Nickel	6.6	1.0		mg/Kg	2	11/2/2012 10:32:38 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:32:38 AM
Vanadium	17	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 10:32:38 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-024

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 4:23:52 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 4:23:52 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 4:23:52 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 4:23:52 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-024

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 4:23:52 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 4:23:52 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:23:52 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 4:23:52 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:23:52 AM
Surr: 2,4,6-Tribromophenol	103	21.3-145		%REC	1	10/21/2012 4:23:52 AM
Surr: 2-Fluorobiphenyl	96.9	20-131		%REC	1	10/21/2012 4:23:52 AM
Surr: 2-Fluorophenol	88.8	11.9-130		%REC	1	10/21/2012 4:23:52 AM
Surr: 4-Terphenyl-d14	84.5	25.1-149		%REC	1	10/21/2012 4:23:52 AM
Surr: Nitrobenzene-d5	99.5	25.6-137		%REC	1	10/21/2012 4:23:52 AM
Surr: Phenol-d5	94.5	20.3-132		%REC	1	10/21/2012 4:23:52 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Toluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Ethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Xylenes, Total	ND	0.00229		mg/Kg	1	10/16/2012 4:02:26 PM
Methyl tert-butyl ether (MTBE)	0.00300	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2,4-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,3,5-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dichloroethane (EDC)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dibromoethane (EDB)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Naphthalene	ND	0.00229		mg/Kg	1	10/16/2012 4:02:26 PM
1-Methylnaphthalene	ND	0.00457		mg/Kg	1	10/16/2012 4:02:26 PM
2-Methylnaphthalene	ND	0.00457		mg/Kg	1	10/16/2012 4:02:26 PM
Acetone	0.0561	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromodichloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromoform	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Bromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2-Butanone	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
Carbon tetrachloride	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Chlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Chloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 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 1-13 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-024

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	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Chloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Carbon disulfide	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
4-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
cis-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
cis-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dibromo-3-chloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Dibromochloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Dibromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,3-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,4-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Dichlorodifluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1-Dichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1-Dichloroethene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,3-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Hexachlorobutadiene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Isopropylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
4-Isopropyltoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Methylene chloride	ND	0.00343		mg/Kg	1	10/16/2012 4:02:26 PM
n-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
2-Hexanone	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
n-Propylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
sec-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Styrene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
4-Methyl-2-pentanone	ND	0.0114		mg/Kg	1	10/16/2012 4:02:26 PM
tert-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,1,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,2,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Tetrachloroethene (PCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
trans-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
trans-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2,3-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,2,4-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,1-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
1,1,2-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Trichloroethene (TCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Trichlorofluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 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 1-13 (4-6')

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-024

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	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Vinyl chloride	ND	0.00114		mg/Kg	1	10/16/2012 4:02:26 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	10/16/2012 4:02:26 PM
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	1	10/16/2012 4:02:26 PM
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	10/16/2012 4:02:26 PM
Surr: Toluene-d8	88.5	70-130		%REC	1	10/16/2012 4:02:26 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 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (4-6") DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-025

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	9.7		mg/Kg	1	10/16/2012 12:28:37 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/16/2012 12:28:37 PM
Surr: DNOP	97.6	77.6-140		%REC	1	10/16/2012 12:28:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2012 4:50:17 AM
Surr: BFB	91.2	84-116		%REC	1	10/22/2012 4:50:17 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:40:11 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Barium	290	1.0		mg/Kg	10	11/2/2012 3:11:09 PM
Beryllium	0.68	0.30		mg/Kg	2	11/2/2012 10:35:02 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:35:02 AM
Chromium	7.3	0.60		mg/Kg	2	11/2/2012 10:35:02 AM
Cobalt	4.0	0.60		mg/Kg	2	11/2/2012 10:35:02 AM
Iron	11000	500		mg/Kg	500	11/2/2012 3:13:34 PM
Lead	3.0	0.50		mg/Kg	2	11/2/2012 10:35:02 AM
Manganese	310	1.0		mg/Kg	10	11/2/2012 3:11:09 PM
Nickel	6.5	1.0		mg/Kg	2	11/2/2012 10:35:02 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:35:02 AM
Vanadium	16	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 10:35:02 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Aniline	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Azobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM

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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 1-13 (4-6") DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-025

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 4:52:46 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Carbazole	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/21/2012 4:52:46 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Chrysene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/21/2012 4:52:46 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/21/2012 4:52:46 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Fluorene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Isophorone	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Naphthalene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 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 1-13 (4-6") DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-025

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 4:52:46 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/21/2012 4:52:46 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/21/2012 4:52:46 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Phenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Pyrene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Pyridine	ND	0.50		mg/Kg	1	10/21/2012 4:52:46 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/21/2012 4:52:46 AM
Surr: 2,4,6-Tribromophenol	90.7	21.3-145		%REC	1	10/21/2012 4:52:46 AM
Surr: 2-Fluorobiphenyl	92.2	20-131		%REC	1	10/21/2012 4:52:46 AM
Surr: 2-Fluorophenol	91.5	11.9-130		%REC	1	10/21/2012 4:52:46 AM
Surr: 4-Terphenyl-d14	84.4	25.1-149		%REC	1	10/21/2012 4:52:46 AM
Surr: Nitrobenzene-d5	95.9	25.6-137		%REC	1	10/21/2012 4:52:46 AM
Surr: Phenol-d5	96.3	20.3-132		%REC	1	10/21/2012 4:52:46 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Toluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Ethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Xylenes, Total	ND	0.00227		mg/Kg	1	10/16/2012 4:33:18 PM
Methyl tert-butyl ether (MTBE)	0.00604	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2,4-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,3,5-Trimethylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dichloroethane (EDC)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dibromoethane (EDB)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Naphthalene	ND	0.00227		mg/Kg	1	10/16/2012 4:33:18 PM
1-Methylnaphthalene	ND	0.00455		mg/Kg	1	10/16/2012 4:33:18 PM
2-Methylnaphthalene	ND	0.00455		mg/Kg	1	10/16/2012 4:33:18 PM
Acetone	0.0645	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromodichloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromoform	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Bromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2-Butanone	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
Carbon tetrachloride	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Chlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Chloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 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

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- H Holding times for preparation or analysis exceeded
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-13 (4-6") DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-025

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	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Chloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Carbon disulfide	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
4-Chlorotoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
cis-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
cis-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dibromo-3-chloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Dibromochloromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Dibromomethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,3-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,4-Dichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Dichlorodifluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1-Dichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1-Dichloroethene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,3-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2,2-Dichloropropane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Hexachlorobutadiene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Isopropylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
4-Isopropyltoluene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Methylene chloride	ND	0.00341		mg/Kg	1	10/16/2012 4:33:18 PM
n-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
2-Hexanone	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
n-Propylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
sec-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Styrene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
4-Methyl-2-pentanone	ND	0.0114		mg/Kg	1	10/16/2012 4:33:18 PM
tert-Butylbenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,1,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,2,2-Tetrachloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Tetrachloroethene (PCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
trans-1,2-DCE	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
trans-1,3-Dichloropropene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2,3-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,2,4-Trichlorobenzene	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,1-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
1,1,2-Trichloroethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Trichloroethene (TCE)	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Trichlorofluoromethane	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 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 1-13 (4-6') DUP

Project: SWMU NO.1

Collection Date: 10/12/2012 3:00:00 PM

Lab ID: 1210692-025

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	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Vinyl chloride	ND	0.00114		mg/Kg	1	10/16/2012 4:33:18 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	10/16/2012 4:33:18 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/16/2012 4:33:18 PM
Surr: Dibromofluoromethane	97.5	70-130		%REC	1	10/16/2012 4:33:18 PM
Surr: Toluene-d8	84.7	70-130		%REC	1	10/16/2012 4:33:18 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 1-37 GW

Project: SWMU NO.1

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

Lab ID: 1210692-026

Matrix: AQUEOUS

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	1.0	1.0		mg/L	1	10/16/2012 11:18:43 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/16/2012 11:18:43 PM
Surr: DNOP	112	79.5-166		%REC	1	10/16/2012 11:18:43 PM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	1.4	0.50		mg/L	5	10/17/2012 10:22:10 PM
Chloride	1100	50		mg/L	100	10/17/2012 10:09:45 PM
Sulfate	500	10		mg/L	20	10/15/2012 1:54:26 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	0.24	0.0020		mg/L	1	10/19/2012 9:09:18 PM
Beryllium	ND	0.0020		mg/L	1	10/19/2012 9:09:18 PM
Cadmium	ND	0.0020		mg/L	1	10/19/2012 9:09:18 PM
Chromium	ND	0.0060		mg/L	1	10/19/2012 9:09:18 PM
Cobalt	0.026	0.0060		mg/L	1	10/19/2012 9:09:18 PM
Iron	2.5	0.10	*	mg/L	5	10/23/2012 1:33:03 PM
Manganese	1.1	0.010	*	mg/L	5	10/19/2012 9:12:15 PM
Nickel	0.26	0.010	*	mg/L	1	10/19/2012 9:09:18 PM
Silver	ND	0.0050		mg/L	1	10/19/2012 9:09:18 PM
Vanadium	ND	0.050		mg/L	1	10/19/2012 9:09:18 PM
Zinc	0.023	0.010		mg/L	1	10/19/2012 9:09:18 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0025		mg/L	2.5	10/24/2012 5:14:06 PM
Arsenic	0.0082	0.0025		mg/L	2.5	10/24/2012 5:14:06 PM
Lead	0.0041	0.0025		mg/L	2.5	10/24/2012 5:14:06 PM
Selenium	0.0072	0.0025		mg/L	2.5	11/12/2012 7:36:28 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:35:33 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Acenaphthylene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Aniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Anthracene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Azobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benz(a)anthracene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Benzoic acid	ND	20		µg/L	1	10/20/2012 7:38:38 PM
Benzyl alcohol	ND	10		µg/L	1	10/20/2012 7:38:38 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-37 GW

Project: SWMU NO.1

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

Lab ID: 1210692-026

Matrix: AQUEOUS

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-chloroethoxy)methane	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Carbazole	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Chloroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Chlorophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Chrysene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/20/2012 7:38:38 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Dibenzofuran	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Diethyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Dimethyl phthalate	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Fluoranthene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Fluorene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Hexachloroethane	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Isophorone	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Methylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
3+4-Methylphenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/20/2012 7:38:38 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 1-37 GW

Project: SWMU NO.1

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

Lab ID: 1210692-026

Matrix: AQUEOUS

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Naphthalene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Nitroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
3-Nitroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Nitroaniline	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Nitrobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2-Nitrophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
4-Nitrophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Pentachlorophenol	ND	20		µg/L	1	10/20/2012 7:38:38 PM
Phenanthrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Phenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Pyrene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Pyridine	ND	10		µg/L	1	10/20/2012 7:38:38 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/20/2012 7:38:38 PM
Surr: 2,4,6-Tribromophenol	94.8	42.9-124		%REC	1	10/20/2012 7:38:38 PM
Surr: 2-Fluorobiphenyl	87.0	40-108		%REC	1	10/20/2012 7:38:38 PM
Surr: 2-Fluorophenol	59.8	23.6-94.8		%REC	1	10/20/2012 7:38:38 PM
Surr: 4-Terphenyl-d14	82.4	41.9-103		%REC	1	10/20/2012 7:38:38 PM
Surr: Nitrobenzene-d5	85.3	42.6-114		%REC	1	10/20/2012 7:38:38 PM
Surr: Phenol-d5	45.8	20.3-74.7		%REC	1	10/20/2012 7:38:38 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	1.1	1.0		µg/L	1	10/18/2012 1:11:24 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Methyl tert-butyl ether (MTBE)	130	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 1:11:24 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 1:11:24 AM
Acetone	39	10		µg/L	1	10/18/2012 1:11:24 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 1:11:24 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 1-37 GW

Project: SWMU NO.1

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

Lab ID: 1210692-026

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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 1:11:24 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 1:11:24 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
4-Isopropyltoluene	12	1.0		µg/L	1	10/18/2012 1:11:24 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 1:11:24 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 1:11:24 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 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 1-37 GW

Project: SWMU NO.1

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

Lab ID: 1210692-026

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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 1:11:24 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 1:11:24 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 1:11:24 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 1:11:24 AM
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%REC	1	10/18/2012 1:11:24 AM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	1	10/18/2012 1:11:24 AM
Surr: Dibromofluoromethane	95.6	70-130		%REC	1	10/18/2012 1:11:24 AM
Surr: Toluene-d8	95.4	70-130		%REC	1	10/18/2012 1:11:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	0.56	0.050		mg/L	1	10/20/2012 7:59:17 PM
Surr: BFB	93.0	70-130		%REC	1	10/20/2012 7:59:17 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: EB101112

Project: SWMU NO.1

Collection Date: 10/11/2012 3:45:00 PM

Lab ID: 1210692-027

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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	10/16/2012 11:43:35 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/16/2012 11:43:35 PM
Surr: DNOP	106	79.5-166		%REC	1	10/16/2012 11:43:35 PM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	ND	0.10		mg/L	1	10/17/2012 10:34:35 PM
Chloride	ND	0.50		mg/L	1	10/17/2012 10:34:35 PM
Sulfate	ND	0.50		mg/L	1	10/17/2012 10:34:35 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Beryllium	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Cadmium	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Chromium	ND	0.0060		mg/L	1	10/19/2012 9:15:39 PM
Cobalt	ND	0.0060		mg/L	1	10/19/2012 9:15:39 PM
Iron	0.13	0.020		mg/L	1	10/23/2012 1:37:58 PM
Manganese	ND	0.0020		mg/L	1	10/19/2012 9:15:39 PM
Nickel	ND	0.010		mg/L	1	10/19/2012 9:15:39 PM
Silver	ND	0.0050		mg/L	1	10/19/2012 9:15:39 PM
Vanadium	ND	0.050		mg/L	1	10/19/2012 9:15:39 PM
Zinc	ND	0.010		mg/L	1	10/19/2012 9:15:39 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
Arsenic	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
Lead	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
Selenium	ND	0.0025		mg/L	2.5	10/19/2012 3:29:45 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:37:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Acenaphthylene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Aniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Anthracene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Azobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benz(a)anthracene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Benzoic acid	ND	20		µg/L	1	10/20/2012 8:07:55 PM
Benzyl alcohol	ND	10		µg/L	1	10/20/2012 8:07:55 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: EB101112

Project: SWMU NO.1

Collection Date: 10/11/2012 3:45:00 PM

Lab ID: 1210692-027

Matrix: AQUEOUS

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-chloroethoxy)methane	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Carbazole	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Chloroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Chlorophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Chrysene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/20/2012 8:07:55 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Dibenzofuran	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Diethyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Dimethyl phthalate	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Fluoranthene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Fluorene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Hexachloroethane	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Isophorone	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Methylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
3+4-Methylphenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/20/2012 8:07:55 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: EB101112

Project: SWMU NO.1

Collection Date: 10/11/2012 3:45:00 PM

Lab ID: 1210692-027

Matrix: AQUEOUS

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Naphthalene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
3-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Nitrobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
4-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Pentachlorophenol	ND	20		µg/L	1	10/20/2012 8:07:55 PM
Phenanthrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Phenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Pyrene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Pyridine	ND	10		µg/L	1	10/20/2012 8:07:55 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:07:55 PM
Surr: 2,4,6-Tribromophenol	96.8	42.9-124		%REC	1	10/20/2012 8:07:55 PM
Surr: 2-Fluorobiphenyl	87.7	40-108		%REC	1	10/20/2012 8:07:55 PM
Surr: 2-Fluorophenol	61.3	23.6-94.8		%REC	1	10/20/2012 8:07:55 PM
Surr: 4-Terphenyl-d14	84.0	41.9-103		%REC	1	10/20/2012 8:07:55 PM
Surr: Nitrobenzene-d5	96.4	42.6-114		%REC	1	10/20/2012 8:07:55 PM
Surr: Phenol-d5	49.5	20.3-74.7		%REC	1	10/20/2012 8:07:55 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:07:44 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:07:44 AM
Acetone	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 2:07:44 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: EB101112

Project: SWMU NO.1

Collection Date: 10/11/2012 3:45:00 PM

Lab ID: 1210692-027

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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 2:07:44 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 2:07:44 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 2:07:44 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 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: EB101112

Project: SWMU NO.1

Collection Date: 10/11/2012 3:45:00 PM

Lab ID: 1210692-027

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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 2:07:44 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 2:07:44 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 2:07:44 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 2:07:44 AM
Surr: 1,2-Dichloroethane-d4	89.8	70-130		%REC	1	10/18/2012 2:07:44 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1	10/18/2012 2:07:44 AM
Surr: Dibromofluoromethane	93.3	70-130		%REC	1	10/18/2012 2:07:44 AM
Surr: Toluene-d8	93.5	70-130		%REC	1	10/18/2012 2:07:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 8:27:45 PM
Surr: BFB	93.1	70-130		%REC	1	10/20/2012 8:27:45 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210692

Date Reported: 11/19/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101212

Project: SWMU NO.1

Collection Date: 10/12/2012 4:20:00 PM

Lab ID: 1210692-028

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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	10/17/2012 12:08:42 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/17/2012 12:08:42 AM
Surr: DNOP	117	79.5-166		%REC	1	10/17/2012 12:08:42 AM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Fluoride	ND	0.10		mg/L	1	10/15/2012 5:13:00 PM
Chloride	ND	0.50		mg/L	1	10/15/2012 5:13:00 PM
Sulfate	ND	0.50		mg/L	1	10/15/2012 5:13:00 PM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Beryllium	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Chromium	ND	0.0060		mg/L	1	10/17/2012 9:19:39 PM
Cobalt	ND	0.0060		mg/L	1	10/17/2012 9:19:39 PM
Iron	ND	0.020		mg/L	1	10/18/2012 1:59:51 PM
Manganese	ND	0.0020		mg/L	1	10/17/2012 9:19:39 PM
Nickel	ND	0.010		mg/L	1	10/17/2012 9:19:39 PM
Silver	ND	0.0050		mg/L	1	10/17/2012 9:19:39 PM
Vanadium	ND	0.050		mg/L	1	10/17/2012 9:19:39 PM
Zinc	ND	0.010		mg/L	1	10/17/2012 9:19:39 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
Arsenic	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
Lead	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
Selenium	ND	0.0010		mg/L	1	10/25/2012 7:18:12 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/24/2012 7:39:06 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Acenaphthylene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Aniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Anthracene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Azobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benz(a)anthracene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Benzoic acid	ND	20		µg/L	1	10/20/2012 8:37:13 PM
Benzyl alcohol	ND	10		µg/L	1	10/20/2012 8:37:13 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: EB101212

Project: SWMU NO.1

Collection Date: 10/12/2012 4:20:00 PM

Lab ID: 1210692-028

Matrix: AQUEOUS

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-chloroethoxy)methane	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Carbazole	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Chloroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Chlorophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Chrysene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/20/2012 8:37:13 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Dibenzofuran	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Diethyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Dimethyl phthalate	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Fluoranthene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Fluorene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Hexachloroethane	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Isophorone	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Methylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
3+4-Methylphenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/20/2012 8:37:13 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: EB101212

Project: SWMU NO.1

Collection Date: 10/12/2012 4:20:00 PM

Lab ID: 1210692-028

Matrix: AQUEOUS

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Naphthalene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
3-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Nitroaniline	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Nitrobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
4-Nitrophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Pentachlorophenol	ND	20		µg/L	1	10/20/2012 8:37:13 PM
Phenanthrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Phenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Pyrene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Pyridine	ND	10		µg/L	1	10/20/2012 8:37:13 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/20/2012 8:37:13 PM
Surr: 2,4,6-Tribromophenol	90.5	42.9-124		%REC	1	10/20/2012 8:37:13 PM
Surr: 2-Fluorobiphenyl	87.6	40-108		%REC	1	10/20/2012 8:37:13 PM
Surr: 2-Fluorophenol	56.6	23.6-94.8		%REC	1	10/20/2012 8:37:13 PM
Surr: 4-Terphenyl-d14	84.3	41.9-103		%REC	1	10/20/2012 8:37:13 PM
Surr: Nitrobenzene-d5	84.6	42.6-114		%REC	1	10/20/2012 8:37:13 PM
Surr: Phenol-d5	47.1	20.3-74.7		%REC	1	10/20/2012 8:37:13 PM
EPA METHOD 8260B: VOLATILES						Analyst: DJF
Benzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:35:59 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 2:35:59 AM
Acetone	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 2:35:59 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: EB101212

Project: SWMU NO.1

Collection Date: 10/12/2012 4:20:00 PM

Lab ID: 1210692-028

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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 2:35:59 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 2:35:59 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 2:35:59 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 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: EB101212

Project: SWMU NO.1

Collection Date: 10/12/2012 4:20:00 PM

Lab ID: 1210692-028

Matrix: AQUEOUS

Received Date: 10/13/2012 8:30:00 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 2:35:59 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 2:35:59 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 2:35:59 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 2:35:59 AM
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%REC	1	10/18/2012 2:35:59 AM
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	1	10/18/2012 2:35:59 AM
Surr: Dibromofluoromethane	94.7	70-130		%REC	1	10/18/2012 2:35:59 AM
Surr: Toluene-d8	95.9	70-130		%REC	1	10/18/2012 2:35:59 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 8:56:02 PM
Surr: BFB	91.6	70-130		%REC	1	10/20/2012 8:56:02 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: Trip Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210692-029

Matrix: TRIP BLANK

Received Date: 10/13/2012 8:30:00 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 5:27:32 AM
Toluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Ethylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Naphthalene	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 5:27:32 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/18/2012 5:27:32 AM
Acetone	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Bromobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Bromoform	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Bromomethane	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
2-Butanone	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Carbon disulfide	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Chlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Chloroethane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Chloroform	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Chloromethane	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Dibromomethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
2-Hexanone	ND	10		µg/L	1	10/18/2012 5:27:32 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: Trip Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210692-029

Matrix: TRIP BLANK

Received Date: 10/13/2012 8:30:00 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 5:27:32 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/18/2012 5:27:32 AM
Methylene Chloride	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/18/2012 5:27:32 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Styrene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/18/2012 5:27:32 AM
Vinyl chloride	ND	1.0		µg/L	1	10/18/2012 5:27:32 AM
Xylenes, Total	ND	1.5		µg/L	1	10/18/2012 5:27:32 AM
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%REC	1	10/18/2012 5:27:32 AM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	1	10/18/2012 5:27:32 AM
Surr: Dibromofluoromethane	91.9	70-130		%REC	1	10/18/2012 5:27:32 AM
Surr: Toluene-d8	93.0	70-130		%REC	1	10/18/2012 5:27:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 9:24:15 PM
Surr: BFB	99.9	70-130		%REC	1	10/20/2012 9:24:15 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

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

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number	121017007-001	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-001D / SWMU 1-20 (0-0.5)	Sampling Time	12:20 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.247	10/25/2012	CRW	EPA 335.4		
%moisture	1.9	Percent		10/24/2012	CRW	%moisture		

Sample Number	121017007-002	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-002D / SWMU 1-20 (0-0.5) DUP	Sampling Time	12:20 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.277	10/25/2012	CRW	EPA 335.4		
%moisture	1.9	Percent		10/24/2012	CRW	%moisture		

Sample Number	121017007-003	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-003D / SWMU 1-20 (1.5-2)	Sampling Time	12:30 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.256	10/25/2012	CRW	EPA 335.4		
%moisture	4.9	Percent		10/24/2012	CRW	%moisture		

Sample Number	121017007-004	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-004D / SWMU 1-20 (4-6)	Sampling Time	12:45 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.278	10/25/2012	CRW	EPA 335.4		
%moisture	10.4	Percent		10/24/2012	CRW	%moisture		

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

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Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number	121017007-005	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-005D / SWMU 1-20 (10-12)	Sampling Time	1:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.293	10/25/2012	CRW	EPA 335.4	
%moisture	14.7	Percent		10/24/2012	CRW	%moisture	

Sample Number	121017007-006	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-006D / SWMU 1-38 (0-0.5)	Sampling Time	2:20 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.995	mg/Kg	0.27	10/25/2012	CRW	EPA 335.4	
%moisture	7.9	Percent		10/24/2012	CRW	%moisture	

Sample Number	121017007-007	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-007D / SWMU 1-38 (1.5-2)	Sampling Time	2:30 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.299	mg/Kg	0.284	10/25/2012	CRW	EPA 335.4	
%moisture	12.5	Percent		10/24/2012	CRW	%moisture	

Sample Number	121017007-008	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-008D / SWMU 1-38 (6-8)	Sampling Time	2:45 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.293	10/25/2012	CRW	EPA 335.4	
%moisture	17	Percent		10/24/2012	CRW	%moisture	

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Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number	121017007-009	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-009D / SWMU 1-27 (0-0.5)	Sampling Time	9:00 AM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	0.282	mg/Kg	0.258	10/25/2012	CRW	EPA 335.4		
%moisture	2.9	Percent		10/24/2012	CRW	%moisture		

Sample Number	121017007-010	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-010D / SWMU 1-27 (1.5-2)	Sampling Time	9:15 AM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.26	10/25/2012	CRW	EPA 335.4		
%moisture	4.1	Percent		10/30/2012	CRW	%moisture		

Sample Number	121017007-011	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-011D / SWMU 1-28 (0-0.5)	Sampling Time	9:50 AM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	1.43	mg/Kg	0.258	10/25/2012	CRW	EPA 335.4		
%moisture	3.6	Percent		10/30/2012	CRW	%moisture		

Sample Number	121017007-012	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-012D / SWMU 1-28 (1.5-2)	Sampling Time	10:10 AM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.267	10/25/2012	CRW	EPA 335.4		
%moisture	6.5	Percent		10/30/2012	CRW	%moisture		

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87893; ID:ID00013; IN:C-ID-01; KY:90142; MT:CERT0028; NM: ID00013; OR:ID200001-002; WA:C595
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Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number	121017007-013	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-013D / SWMU 1-28 (1.5-2) DUP	Sampling Time	10:10 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.262	10/26/2012	CRW	EPA 335.4	
%moisture	5	Percent		10/30/2012	CRW	%moisture	

Sample Number	121017007-014	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-014D / SWMU 1-30 (0-0.5)	Sampling Time	11:40 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.633	mg/Kg	0.26	10/26/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/30/2012	CRW	%moisture	

Sample Number	121017007-015	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-015D / SWMU 1-30 (1.5-2)	Sampling Time	12:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.274	10/26/2012	CRW	EPA 335.4	
%moisture	9	Percent		10/30/2012	CRW	%moisture	

Sample Number	121017007-016	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-016D / SWMU 1-30 (4-6)	Sampling Time	12:10 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.282	10/26/2012	CRW	EPA 335.4	
%moisture	12.1	Percent		10/30/2012	CRW	%moisture	

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

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Attn: ANDY FREEMAN

Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number	121017007-017	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-017D / SWMU 1-35 (0-0.5)	Sampling Time	12:45 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	0.276	mg/Kg	0.263	10/26/2012	CRW	EPA 335.4		
%moisture	9.9	Percent		10/30/2012	CRW	%moisture		
Sample Number	121017007-018	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-018D / SWMU 1-35 (1.5-2)	Sampling Time	1:00 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	0.287	mg/Kg	0.278	10/26/2012	CRW	EPA 335.4		
%moisture	10	Percent		10/30/2012	CRW	%moisture		
Sample Number	121017007-019	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-019D / SWMU 1-35 (4-6)	Sampling Time	1:10 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	ND	mg/Kg	0.287	10/26/2012	CRW	EPA 335.4		
%moisture	13.8	Percent		10/30/2012	CRW	%moisture		
Sample Number	121017007-020	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM			
Client Sample ID	1210692-021D / SWMU 1-13 (0-0.5)	Sampling Time	2:05 PM					
Matrix	Soil							
Comments								
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier	
Cyanide	0.326	mg/Kg	0.264	10/26/2012	CRW	EPA 335.4		
%moisture	6.5	Percent		10/30/2012	CRW	%moisture		

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Batch #: 121017007
Project Name: 1210692

Analytical Results Report

Sample Number	121017007-021	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-022D / SWMU 1-13 (1.5-2)	Sampling Time	2:25 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.271	10/26/2012	CRW	EPA 335.4	
%moisture	8.3	Percent		10/30/2012	CRW	%moisture	

Sample Number	121017007-022	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-023D / SWMU 1-13 (2-4)	Sampling Time	2:35 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.279	10/26/2012	CRW	EPA 335.4	
%moisture	11.5	Percent		10/30/2012	CRW	%moisture	

Sample Number	121017007-023	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-024D / SWMU 1-13 (4-6)	Sampling Time	3:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.284	10/26/2012	CRW	EPA 335.4	
%moisture	13.7	Percent		10/30/2012	CRW	%moisture	

Sample Number	121017007-024	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-025D / SWMU 1-13 (4-6) DUP	Sampling Time	3:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.292	10/26/2012	CRW	EPA 335.4	
%moisture	14.9	Percent		10/30/2012	CRW	%moisture	

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Batch #: 121017007
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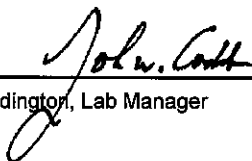
Analytical Results Report

Sample Number	121017007-025	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-026F / SWMU 1-37 GW	Sampling Time	10:00 AM				
Matrix	Water						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0309	mg/L	0.01	10/24/2012	CRW	EPA 335.4	

Sample Number	121017007-026	Sampling Date	10/11/2012	Date/Time Received	10/16/2012 1:16 PM
Client Sample ID	1210692-027F / EB101112	Sampling Time	3:45 PM		
Matrix	Water				
Comments					

Sample Number	121017007-027	Sampling Date	10/12/2012	Date/Time Received	10/16/2012 1:16 PM		
Client Sample ID	1210692-028F / EB101212	Sampling Time	4:20 PM				
Matrix	Water						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/26/2012	CRW	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-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#: 1210692

20-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#: 1210692

20-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:	EB101112	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#: 1210692

20-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:	EB101112		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:	EB101112		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:	EB101112		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#: 1210692

20-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								
Selenium	ND	0.0025								

Sample ID	1209C98-001AMS		SampType:	MS		TestCode:	EPA 200.8: Metals			
Client ID:	BatchQC		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186650		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.031	0.0010	0.02500	0.005774	102	70	130			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Metals			
Client ID:	LCSW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186664		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	103	85	115			
Arsenic	0.026	0.0010	0.02500	0	104	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	LCS		SampType:	LCS		TestCode:	EPA 200.8: Metals			
Client ID:	LCSW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186665		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.026	0.0010	0.02500	0	104	85	115			
Arsenic	0.026	0.0010	0.02500	0	105	85	115			
Lead	0.027	0.0010	0.02500	0	106	85	115			
Selenium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	MB		SampType:	MBLK		TestCode:	EPA 200.8: Metals			
Client ID:	PBW		Batch ID:	R6483		RunNo:	6483			
Prep Date:			Analysis Date:	10/25/2012		SeqNo:	186667		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	0.0010								
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-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#: 1210692

20-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#: 1210692

20-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
Mercurv	ND	0.00020								

Sample ID	LCS-4503		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186276		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.2	80	120			

Sample ID	1210675-003BMS		SampType: ms		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4503		RunNo: 6470					
Prep Date:	10/24/2012		Analysis Date: 10/24/2012		SeqNo: 186299		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0042	0.00020	0.005000	0	83.0	75	125			

Sample ID	1210675-003BMSD		SampType:	msd		TestCode:	EPA Method 245.1: Mercury				
Client ID:	BatchQC		Batch ID:	4503		RunNo:	6470				
Prep Date:	10/24/2012		Analysis Date:	10/24/2012		SeqNo:	186300		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Mercury	0.0040	0.00020	0.005000	0	80.1	75	125	3.62	20		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
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#: 1210692

20-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: R6252			RunNo: 6252					
Prep Date:		Analysis Date: 10/15/2012			SeqNo: 180156		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: R6252		RunNo: 6252					
Prep Date:			Analysis Date: 10/15/2012		SeqNo: 180157		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.45	0.10	0.5000	0	90.5	90	110			
Chloride	4.7	0.50	5.000	0	94.6	90	110			
Sulfate	9.8	0.50	10.00	0	97.6	90	110			

Sample ID	1210692-027CMS	SampType: MS			TestCode: EPA Method 300.0: Anions					
Client ID:	EB101112	Batch ID: R6252			RunNo: 6252					
Prep Date:		Analysis Date: 10/15/2012			SeqNo: 180161		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.45	0.10	0.5000	0	89.6	76.6	110			
Chloride	4.7	0.50	5.000	0.1934	90.6	87.8	111			
Sulfate	9.6	0.50	10.00	0	96.4	84.6	122			

Sample ID	1210692-027CMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	EB101112		Batch ID: R6252		RunNo: 6252					
Prep Date:			Analysis Date: 10/15/2012		SeqNo: 180162		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.6	76.6	110	2.19	20	
Chloride	4.7	0.50	5.000	0.1934	90.5	87.8	111	0.131	20	
Sulfate	9.6	0.50	10.00	0	95.7	84.6	122	0.694	20	

Sample ID	1210694-001AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6252		RunNo: 6252					
Prep Date:			Analysis Date: 10/15/2012		SeqNo: 180170		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.2	0.10	0.5000	0.7877	89.9	76.6	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210694-001AMSD			SampType:	MSD		TestCode:	EPA Method 300.0: Anions			
Client ID:	BatchQC			Batch ID:	R6252		RunNo:	6252			
Prep Date:				Analysis Date:	10/15/2012		SeqNo:	180171		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Fluoride	1.2	0.10	0.5000	0.7877	92.4	76.6	110	0.997	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								
Chloride	ND	0.50								
Sulfate	ND	0.50								

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			
Chloride	4.8	0.50	5.000	0	97.0	90	110			
Sulfate	9.6	0.50	10.00	0	95.9	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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: 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		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: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.3	52.6	130			
Surr: DNOP	4.5		5.000		89.5	77.6	140			

Sample ID	MB-4305	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4305			RunNo: 6260					
Prep Date:	10/15/2012	Analysis Date: 10/16/2012			SeqNo: 180406		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.9	77.6	140			

Sample ID	LCS-4305		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4305		RunNo: 6260					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 180407		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.6	52.6	130			
Surr: DNOP	4.0		5.000		80.0	77.6	140			

Sample ID	1210692-001CMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-20 (0-0.5')	Batch ID: 4305			RunNo: 6264					
Prep Date:	10/15/2012	Analysis Date: 10/16/2012			SeqNo: 181188		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	30	9.6	48.17	0	62.7	57.2	146			
Surr: DNOP	3.7		4.817		77.1	77.6	140			S

Sample ID	1210692-001CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-20 (0-0.5')		Batch ID: 4305		RunNo: 6264					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 181190		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210692-001CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-20 (0-0.5')		Batch ID: 4305		RunNo: 6264					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 181190		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	29	9.8	48.92	0	59.5	57.2	146	3.70	24.5	
Surr: DNOP	4.0		4.892		82.2	77.6	140	0	0	

Sample ID	1210692-022CMS		SampType: MS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-13 (1.5-2')		Batch ID: 4297		RunNo: 6264					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 181197		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.8	48.83	15.64	42.9	57.2	146			S
Surr: DNOP	3.9		4.883		80.4	77.6	140			

Sample ID	1210692-022CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-13 (1.5-2')		Batch ID: 4297		RunNo: 6264					
Prep Date:	10/15/2012		Analysis Date: 10/16/2012		SeqNo: 181199		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.8	48.83	15.64	58.1	57.2	146	18.4	24.5	
Surr: DNOP	4.0		4.883		82.0	77.6	140	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4332		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW		Batch ID: 4332		RunNo: 6264					
Prep Date:	10/16/2012		Analysis Date: 10/16/2012		SeqNo: 181203		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		106	79.5	166			

Sample ID	LCS-4332		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 4332		RunNo: 6264					
Prep Date:	10/16/2012		Analysis Date: 10/16/2012		SeqNo: 181204		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.7	1.0	5.000	0	74.3	74	157			
Surr: DNOP	0.47		0.5000		93.6	79.5	166			

Sample ID	LCSD-4332	SampType: LCSD			TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02	Batch ID: 4332			RunNo: 6264					
Prep Date:	10/16/2012	Analysis Date: 10/16/2012			SeqNo: 181205		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	3.9	1.0	5.000	0	78.8	74	157	8.99	23	
Surr: DNOP	0.49		0.5000		97.2	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4362		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4362		RunNo: 6387					
Prep Date:	10/17/2012		Analysis Date: 10/21/2012		SeqNo: 183666		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		90.5	84	116			

Sample ID	LCS-4362		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4362		RunNo: 6387					
Prep Date:	10/17/2012		Analysis Date: 10/21/2012		SeqNo: 183667		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.6	74	117			
Surr: BFB	970		1000		97.3	84	116			

Sample ID	1210803-006AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4362		RunNo: 6387					
Prep Date:	10/17/2012		Analysis Date: 10/21/2012		SeqNo: 183670		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	23	23.26	0	136	70	130			S
Surr: BFB	4200		4651		90.1	84	116			

Sample ID	1210803-006AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4362		RunNo: 6387					
Prep Date:	10/17/2012		Analysis Date: 10/21/2012		SeqNo: 183671		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	25	24.56	0	133	70	130	2.92	22.1	S
Surr: BFB	4400		4912		90.0	84	116	0	0	

Sample ID	MB-4403	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID: 4403			RunNo: 6387					
Prep Date:	10/18/2012	Analysis Date: 10/21/2012			SeqNo: 183713		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.0	84	116			

Sample ID	LCS-4403		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4403		RunNo: 6387					
Prep Date:	10/18/2012		Analysis Date: 10/21/2012		SeqNo: 183714		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.8	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID b2	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184052		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		87.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.2	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.8	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	70	130			

Sample ID 100ng lcsc	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSS	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184056		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.45		0.5000		90.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.6	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.1	70	130			
Surr: Toluene-d8	0.46		0.5000		91.1	70	130			

Sample ID 1210582-003bms	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: BatchQC	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184057		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.7		2.820		95.2	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.820		73.3	70	130			
Surr: Dibromofluoromethane	2.7		2.820		95.5	70	130			
Surr: Toluene-d8	2.7		2.820		95.6	70	130			

Sample ID 1210582-003bmsd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: BatchQC	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184058		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.8		2.820		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.820		69.9	70	130	0	0	S
Surr: Dibromofluoromethane	2.7		2.820		95.4	70	130	0	0	
Surr: Toluene-d8	2.6		2.820		93.2	70	130	0	0	

Sample ID mb-4362	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBS	Batch ID: 4362			RunNo: 6485						
Prep Date: 10/17/2012	Analysis Date: 10/24/2012			SeqNo: 186696		Units: %REC				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.1	70	130			

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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4362		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS		Batch ID: 4362		RunNo: 6485					
Prep Date:	10/17/2012		Analysis Date: 10/24/2012		SeqNo: 186696		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID	lcs-4362		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 4362		RunNo: 6485					
Prep Date:	10/17/2012		Analysis Date: 10/24/2012		SeqNo: 186792		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.1	70	130			
Surr: Toluene-d8	0.47		0.5000		94.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4301		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4301			RunNo: 6259				
Prep Date:	10/15/2012		Analysis Date: 10/15/2012			SeqNo: 180381		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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4301		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4301		RunNo: 6259					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180381		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	43.6		50.00		87.1	70	130			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.1	70	130			
Surr: Dibromofluoromethane	49.1		50.00		98.2	70	130			
Surr: Toluene-d8	43.1		50.00		86.3	70	130			

Sample ID	lcs-4301		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4301		RunNo: 6259					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180383		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.88	1.00	10.00	0	88.8	60	140			
Toluene	8.84	1.00	10.00	0	88.4	60	140			
Chlorobenzene	9.69	1.00	10.00	0	96.9	60	140			
1,1-Dichloroethene	11.2	1.00	10.00	0	112	60	140			
Trichloroethene (TCE)	9.94	1.00	10.00	0	99.4	60	140			
Surr: 1,2-Dichloroethane-d4	44.2		50.00		88.3	70	130			
Surr: 4-Bromofluorobenzene	47.2		50.00		94.3	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4301		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4301		RunNo: 6259					
Prep Date:	10/15/2012		Analysis Date: 10/15/2012		SeqNo: 180383		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	51.4		50.00		103	70	130			
Surr: Toluene-d8	44.0		50.00		87.9	70	130			

Sample ID	mb-4333		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4333		RunNo: 6282					
Prep Date:	10/16/2012		Analysis Date: 10/16/2012		SeqNo: 181101		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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4333		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4333			RunNo: 6282				
Prep Date:	10/16/2012		Analysis Date: 10/16/2012			SeqNo: 181101 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	45.3		50.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	46.7		50.00		93.4	70	130			
Surr: Dibromofluoromethane	39.5		50.00		79.1	70	130			
Surr: Toluene-d8	50.6		50.00		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4333	SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS	Batch ID: 4333			RunNo: 6282					
Prep Date:	10/16/2012	Analysis Date: 10/16/2012			SeqNo: 181103		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	13.0	1.00	12.50	0	104	60	140			
Toluene	10.5	1.00	12.50	0	83.7	60	140			
Chlorobenzene	11.5	1.00	12.50	0	92.3	60	140			
1,1-Dichloroethene	14.0	1.00	12.50	0	112	60	140			
Trichloroethene (TCE)	18.1	1.00	12.50	0	145	60	140			S
Surr: 1,2-Dichloroethane-d4	44.4		50.00		88.8	70	130			
Surr: 4-Bromofluorobenzene	47.2		50.00		94.4	70	130			
Surr: Dibromofluoromethane	39.3		50.00		78.6	70	130			
Surr: Toluene-d8	43.1		50.00		86.1	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#: 1210692

20-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#: 1210692

20-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#: 1210692

20-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			

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								

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#: 1210692

20-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
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	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			

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#: 1210692

20-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
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			
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:	BatchQC	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:	BatchQC			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#: 1210692

20-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#: 1210692

20-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.
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#: 1210692

20-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: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

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: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.2		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	lcs-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: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	72.3	49.7	98.1			
4-Chloro-3-methylphenol	2.5	0.50	3.330	0	75.5	43.8	89.1			
2-Chlorophenol	2.3	0.20	3.330	0	68.0	41.1	96.9			
1,4-Dichlorobenzene	1.1	0.20	1.670	0	66.6	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	76.5	44.4	104			
N-Nitrosodi-n-propylamine	1.2	0.20	1.670	0	74.5	39.1	86.9			
4-Nitrophenol	2.1	0.25	3.330	0	63.7	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	62.9	36.2	80			
Phenol	2.2	0.20	3.330	0	66.8	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	78.7	37.8	98.3			
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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210653-001CMS		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC		Batch ID: 4304		RunNo: 6376					
Prep Date:	10/15/2012		Analysis Date: 10/21/2012		SeqNo: 183387		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.40	1.664	0	74.7	25.6	142			
4-Chloro-3-methylphenol	2.6	1.0	3.318	0	78.7	63.7	100			
2-Chlorophenol	2.4	0.40	3.318	0	73.0	22.2	126			
1,4-Dichlorobenzene	1.1	0.40	1.664	0	69.0	12.4	115			
2,4-Dinitrotoluene	1.3	1.0	1.664	0	78.8	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.40	1.664	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.50	3.318	0	73.6	36.7	130			
Pentachlorophenol	2.2	0.80	3.318	0	66.4	15.8	113			
Phenol	2.5	0.40	3.318	0	73.9	25.1	124			
Pyrene	1.5	0.40	1.664	0	88.1	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.40	1.664	0	82.7	30	113			
Surr: 2,4,6-Tribromophenol	3.3		3.318		101	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.664		94.0	20	131			
Surr: 2-Fluorophenol	2.9		3.318		88.7	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.664		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.664		103	25.6	137			
Surr: Phenol-d5	3.2		3.318		97.8	20.3	132			

Sample ID	1210692-010CMS		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-27 (1.5-2')		Batch ID: 4337		RunNo: 6376					
Prep Date:	10/16/2012		Analysis Date: 10/21/2012		SeqNo: 183388		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.680	0	74.0	25.6	142			
4-Chloro-3-methylphenol	2.5	0.50	3.350	0	75.2	63.7	100			
2-Chlorophenol	2.4	0.20	3.350	0	70.8	22.2	126			
1,4-Dichlorobenzene	1.2	0.20	1.680	0	71.7	12.4	115			
2,4-Dinitrotoluene	1.3	0.50	1.680	0	79.4	14.9	142			
N-Nitrosodi-n-propylamine	1.3	0.20	1.680	0	79.8	13.9	136			
4-Nitrophenol	2.4	0.25	3.350	0.08908	69.3	36.7	130			
Pentachlorophenol	2.2	0.40	3.350	0	67.0	15.8	113			
Phenol	2.3	0.20	3.350	0	69.6	25.1	124			
Pyrene	1.2	0.20	1.680	0	74.2	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.20	1.680	0	83.9	30	113			
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			

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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210653-001CMSD	SampType: MSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID: 4304			RunNo: 6376					
Prep Date:	10/15/2012	Analysis Date: 10/21/2012			SeqNo: 183389		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.3	0.40	1.672	0	75.2	25.6	142	1.09	22	
4-Chloro-3-methylphenol	2.4	1.0	3.334	0	73.0	63.7	100	7.05	27.3	
2-Chlorophenol	2.3	0.40	3.334	0	67.8	22.2	126	6.86	26.3	
1,4-Dichlorobenzene	1.0	0.40	1.672	0	61.9	12.4	115	10.4	27.4	
2,4-Dinitrotoluene	1.3	1.0	1.672	0	77.2	14.9	142	1.50	27.4	
N-Nitrosodi-n-propylamine	1.3	0.40	1.672	0	75.4	13.9	136	7.14	22.6	
4-Nitrophenol	2.4	0.50	3.334	0	73.4	36.7	130	0.281	20	
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:	SWMU 1-27 (1.5-2')	Batch ID:	4337		RunNo:	6376					
Prep Date:	10/16/2012	Analysis Date:	10/21/2012		SeqNo:	183390		Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Acenaphthene	1.3	0.20	1.671	0	76.8	25.6	142	3.14	22		
4-Chloro-3-methylphenol	2.7	0.50	3.332	0	79.6	63.7	100	5.18	27.3		
2-Chlorophenol	2.3	0.20	3.332	0	70.1	22.2	126	1.57	26.3		
1,4-Dichlorobenzene	1.1	0.20	1.671	0	68.7	12.4	115	4.83	27.4		
2,4-Dinitrotoluene	1.3	0.50	1.671	0	80.6	14.9	142	0.963	27.4		
N-Nitrosodi-n-propylamine	1.3	0.20	1.671	0	80.6	13.9	136	0.435	22.6		
4-Nitrophenol	2.5	0.25	3.332	0.08908	70.9	36.7	130	1.76	20		
Pentachlorophenol	2.1	0.40	3.332	0	63.8	15.8	113	5.36	27.1		
Phenol	2.3	0.20	3.332	0	68.6	25.1	124	1.93	32.2		
Pyrene	1.2	0.20	1.671	0	71.2	35.8	124	4.60	29.5		
1,2,4-Trichlorobenzene	1.4	0.20	1.671	0	83.7	30	113	0.749	27.8		
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#: 1210692

20-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#: 1210692

20-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:

* 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#: 1210692

20-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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4424		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4424		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185307		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4424		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4424		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185308		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID	1210692-019CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 1-35 (4-6')		Batch ID: 4424		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185333		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1641	0.01987	98.5	75	125			

Sample ID	1210692-019CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 1-35 (4-6')		Batch ID: 4424		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185334		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1665	0.01987	100	75	125	2.83	20	

Sample ID	MB-4425		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185335		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-4425		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185336		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.4	80	120			

Sample ID	1210811-014CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185361		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1670	0.02118	109	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210811-014CMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	BatchQC	Batch ID:	4425	RunNo:	6443					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185362	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1653	0.02118	109	75	125	1.12	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4498	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4498	RunNo:	6499					
Prep Date:	10/24/2012	Analysis Date:	10/25/2012	SeqNo:	187241	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-4498	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4498	RunNo:	6499					
Prep Date:	10/24/2012	Analysis Date:	10/25/2012	SeqNo:	187242	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	95.8	80	120			
Arsenic	26	2.5	25.00	0	104	80	120			
Barium	24	0.10	25.00	0	97.3	80	120			
Beryllium	26	0.15	25.00	0	104	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	24	0.30	25.00	0	97.8	80	120			
Cobalt	24	0.30	25.00	0	95.8	80	120			
Lead	25	0.25	25.00	0	99.0	80	120			
Manganese	24	0.10	25.00	0.03500	95.1	80	120			
Nickel	24	0.50	25.00	0	94.9	80	120			
Selenium	25	2.5	25.00	0	102	80	120			
Silver	5.1	0.25	5.000	0	102	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	24	2.5	25.00	0	97.2	80	120			

Sample ID	MB-4499	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4499	RunNo:	6598					
Prep Date:	10/24/2012	Analysis Date:	10/31/2012	SeqNo:	190715	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								

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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4499		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	4499		RunNo:	6598			
Prep Date:	10/24/2012		Analysis Date:	10/31/2012		SeqNo:	190715		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								

Sample ID	LCS-4499		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	4499		RunNo:	6598			
Prep Date:	10/24/2012		Analysis Date:	10/31/2012		SeqNo:	190716		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	27	2.5	25.00	0	108	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	26	0.10	25.00	0	104	80	120			
Beryllium	28	0.15	25.00	0.01050	114	80	120			
Cadmium	27	0.10	25.00	0	108	80	120			
Chromium	26	0.30	25.00	0	102	80	120			
Lead	27	0.25	25.00	0	106	80	120			
Manganese	26	0.10	25.00	0.02950	103	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	32	2.5	25.00	0	128	80	120			S
Silver	5.1	0.25	5.000	0	101	80	120			
Vanadium	26	2.5	25.00	0.08900	105	80	120			

Sample ID	MB-4498		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	4498		RunNo:	6670			
Prep Date:	10/24/2012		Analysis Date:	11/2/2012		SeqNo:	192433		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	1.0								

Sample ID	LCS-4498		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	4498		RunNo:	6670			
Prep Date:	10/24/2012		Analysis Date:	11/2/2012		SeqNo:	192434		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	27	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4499		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	4499		RunNo:	6670			
Prep Date:	10/24/2012		Analysis Date:	11/2/2012		SeqNo:	192435		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	ND	0.30								
Iron	ND	1.0								
Selenium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4499		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	4499		RunNo:	6670			
Prep Date:	10/24/2012		Analysis Date:	11/2/2012		SeqNo:	192436		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	26	0.30	25.00	0	102	80	120			
Iron	27	1.0	25.00	0	106	80	120			
Selenium	29	2.5	25.00	0	117	80	120			
Zinc	27	2.5	25.00	0	106	80	120			

Sample ID	1210692-013CMS		SampType:	MS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	SWMU 1-28 (1.5-2')		Batch ID:	4498		RunNo:	6670			
Prep Date:	10/24/2012		Analysis Date:	11/2/2012		SeqNo:	192482		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	12	24.95	0	33.2	75	125			S
Arsenic	26	12	24.95	0	103	75	125			
Beryllium	27	0.75	24.95	0.5601	107	75	125			
Cadmium	25	0.50	24.95	0	102	75	125			
Chromium	34	1.5	24.95	5.956	111	75	125			
Cobalt	29	1.5	24.95	4.075	99.1	75	125			
Lead	26	1.2	24.95	3.120	93.7	75	125			
Nickel	29	2.5	24.95	4.818	98.6	75	125			
Selenium	20	12	24.95	0	78.9	75	125			
Silver	5.0	1.2	4.990	0	101	75	125			
Vanadium	47	12	24.95	21.58	104	75	125			
Zinc	39	12	24.95	11.91	109	75	125			

Sample ID	1210692-013CMSD		SampType:	MSD		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	SWMU 1-28 (1.5-2')		Batch ID:	4498		RunNo:	6670			
Prep Date:	10/24/2012		Analysis Date:	11/2/2012		SeqNo:	192483		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	13	24.98	0	33.0	75	125	0	20	S
Arsenic	27	13	24.98	0	107	75	125	4.04	20	
Beryllium	27	0.75	24.98	0.5601	106	75	125	0.755	20	
Cadmium	25	0.50	24.98	0	100	75	125	1.44	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210692-013CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	SWMU 1-28 (1.5-2')	Batch ID:	4498	RunNo:	6670					
Prep Date:	10/24/2012	Analysis Date:	11/2/2012	SeqNo:	192483	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	32	1.5	24.98	5.956	105	75	125	4.87	20	
Cobalt	28	1.5	24.98	4.075	96.5	75	125	2.12	20	
Lead	26	1.3	24.98	3.120	92.3	75	125	1.22	20	
Nickel	29	2.5	24.98	4.818	96.9	75	125	1.36	20	
Selenium	20	13	24.98	0	78.7	75	125	0.233	20	
Silver	5.0	1.3	4.995	0	99.2	75	125	1.49	20	
Vanadium	46	13	24.98	21.58	98.0	75	125	2.96	20	
Zinc	38	13	24.98	11.91	105	75	125	2.99	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	5ml rb	SampType:	MBLK	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	R6402	RunNo:	6402					
Prep Date:		Analysis Date:	10/21/2012	SeqNo:	184129	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	480		500.0		95.0	70	130			

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	R6402	RunNo:	6402					
Prep Date:		Analysis Date:	10/21/2012	SeqNo:	184130	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	92.2	74.6	137			
Surr: BFB	480		500.0		95.9	70	130			

Sample ID	1210692-001bms	SampType:	MS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	SWMU 1-20 (0-0.5')	Batch ID:	R6402	RunNo:	6402					
Prep Date:		Analysis Date:	10/21/2012	SeqNo:	184148	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	19.34	2.932	82.1	50.3	148			
Surr: BFB	350		386.8		91.5	70	130			

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	R6485	RunNo:	6485					
Prep Date:		Analysis Date:	10/24/2012	SeqNo:	186673	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	450		500.0		89.4	70	130			

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	R6485	RunNo:	6485					
Prep Date:		Analysis Date:	10/24/2012	SeqNo:	186676	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	470		500.0		93.0	70	130			

Sample ID	1210910-005A MS	SampType:	MS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6485	RunNo:	6485					
Prep Date:		Analysis Date:	10/25/2012	SeqNo:	186678	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	340		364.4		94.5	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#: 1210692

20-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210910-005A MSD	SampType:	MSD	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6485	RunNo:	6485					
Prep Date:		Analysis Date:	10/25/2012	SeqNo:	186679	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	310		364.4		85.8	70	130	0	0	

Sample ID	mb-4362	SampType:	MBLK	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	4362	RunNo:	6485					
Prep Date:	10/17/2012	Analysis Date:	10/24/2012	SeqNo:	186691	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	460		500.0		92.1	70	130			

Sample ID	LCS-4362	SampType:	LCS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	4362	RunNo:	6485					
Prep Date:	10/17/2012	Analysis Date:	10/24/2012	SeqNo:	186692	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	90.4	74.6	137			
Surr: BFB	450		500.0		89.2	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#: 1210692

20-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: BatchQC	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/20/2012			SeqNo: 184078		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID 1210660-001amsd	SampType: MSD			TestCode: EPA Method 8015B: Gasoline Range						
Client ID: BatchQC	Batch ID: R6394			RunNo: 6394						
Prep Date:	Analysis Date: 10/20/2012			SeqNo: 184079		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

Sample ID 5ml rb	SampType: MBLK			TestCode: EPA Method 8015B: Gasoline Range						
Client ID: PBW	Batch ID: R6402			RunNo: 6402						
Prep Date:	Analysis Date: 10/21/2012			SeqNo: 184122		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.5		10.00		95.0	70	130			

Sample ID 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015B: Gasoline Range						
Client ID: LCSW	Batch ID: R6402			RunNo: 6402						
Prep Date:	Analysis Date: 10/21/2012			SeqNo: 184125		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	85	115			
Surr: BFB	9.6		10.00		95.9	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210692

Received by/date: AF 10/13/12

Logged By: Michelle Garcia 10/13/2012 8:30:00 AM *Michelle Garcia*

Completed By: Michelle Garcia 10/15/2012 9:55:26 AM *Michelle Garcia*

Reviewed By: *[Signature]* 10/15/12

Chain of Custody

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

Log In

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

of preserved bottles checked _____
for pH: 3 3
(<2 or >12 unless noted)

Adjusted? _____

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	2.1	Good	Not Present			

☒ Standard ☐ Rush

Project Name: SWMU No. 1

Project #: SWMU No. 1

Project #:

Project Manager:

Project Manager:

QA/QC Package:
☒ Standard
☐ Level 4 (Full Validation)

SCOTT CROUCH-RPS

Sampler: TRACY PAYNE-RPO

On Ice ☒ Yes ☐ No

On Ice: ☒ Yes ☐ No
Sample Temperature: 21°C

Sample Temperature: 2, °C		
---------------------------	--	--

Container Type and #	Preservative Type	HEAL No.
		12/1/2003

	ZVIALS	S0B1	-605	81008
--	--------	------	------	-------

CO ₂	SOBI
CO ₂	MEOH

3TARS	-	
		521

2VIALS SOB1	-006
2VIALS MEDH	

3IARS	-	557
-------	---	-----

2VIALS	5001	-001
2VIALS	MEDH	

3, IARS	-	
2, VINIS	GARI	-COX

ZVIALS	MEOH	000
ZVIALS	MEOH	000

3:25 PM	11/11/2011	Received by: [Signature]	Date	Time
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Received by: Edwards Date 10/13/12 Time 0830

[illegible]

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

☒ Standard ☐ Rush

Project Name: SWML No. 1

Project #: SWMU No. 1

Project #:

Project Manager:

Project Manager:

SCOTT CROUCH.

Sampler: TRACY PAYNE
On Ice: ☒ Yes ☐ No

Sample Temperature: 27°C

Container Type and #	Preservative Type	HI
		121

	VIALS	SOCI	-	
--	-------	------	---	--

2 VIALS	MEOH
---------	------

3 JARS	—
--------	---

[illegible]

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Received by:  Date: 

Received by: _____ Date: _____

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
GALLUP REFINERY
 Mailing Address: ROUTE 3 BOX 7
GALLUP, NM 87301
 Phone #: 505-722-0217
 email or Fax#: SCOTT CROUCH-RPS

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
 Accreditation: ☒ NELAP ☐ Other _____
 XEDD (Type) EXCEL

Date	Time	Matrix	Sample Request ID
10/12/14	05	SOIL	GWMU 1-13(0-0.5')
			2 VIALS MEQH
			3 JARS -
1425		GWMU 1-13(1.5-2')	2 VIALS SOBI
			2 VIALS MEQH
			3 JARS -
1435		GWMU 1-13(2-4')	2 VIALS SOBI
			2 VIALS MEQH
			3 JARS -
1500		GWMU 1-13(4-6')	2 VIALS SOBI
			2 VIALS MEQH
			3 JARS -

Date: 10/13/12 Time: 0830
 Relinquished by: [Signature]
 Date: _____ Time: _____
 Relinquished by: _____

Turn-Around Time: ☒ Standard ☐ Rush
 Project Name: _____

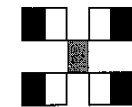
GWMU No. 1
 Project #:

Project Manager:

SCOTT CROUCH-RPS
 Sampler: TRACY PAYNE-RPS
 On Ice: ☒ Yes ☐ No
 Sample Temperature: 2 / °C

Container Type and #	Preservative Type	HEAL No.
2 VIALS	MEQH	-021
3 JARS	-	
2 VIALS	SOBI	-022
2 VIALS	MEQH	
3 JARS	-	
2 VIALS	SOBI	-023
2 VIALS	MEQH	
3 JARS	-	
2 VIALS	SOBI	-024
2 VIALS	MEQH	
3 JARS	-	

Received by: [Signature] Date: 10/13/12 Time: 0830
 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

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Remarks:

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 28, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210811

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 18 sample(s) on 10/17/2012 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 10:55:00 AM

Lab ID: 1210811-001

Matrix: SOIL

Received Date: 10/17/2012 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	10/19/2012 7:02:56 PM
Motor Oil Range Organics (MRO)	280	50		mg/Kg	1	10/19/2012 7:02:56 PM
Surr: DNOP	99.5	77.6-140		%REC	1	10/19/2012 7:02:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 12:12:24 AM
Surr: BFB	92.8	84-116		%REC	1	10/23/2012 12:12:24 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.18	0.033		mg/kg	1	10/23/2012 5:43:45 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Barium	620	2.0		mg/Kg	20	11/2/2012 3:25:22 PM
Beryllium	0.71	0.30		mg/Kg	2	11/2/2012 10:39:08 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:39:08 AM
Chromium	24	0.60		mg/Kg	2	11/2/2012 10:39:08 AM
Cobalt	5.0	0.60		mg/Kg	2	11/2/2012 10:39:08 AM
Iron	12000	500		mg/Kg	500	11/2/2012 3:27:50 PM
Lead	7.0	0.50		mg/Kg	2	11/2/2012 10:39:08 AM
Manganese	600	2.0		mg/Kg	20	11/2/2012 3:25:22 PM
Nickel	15	1.0		mg/Kg	2	11/2/2012 10:39:08 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:39:08 AM
Vanadium	21	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
Zinc	53	5.0		mg/Kg	2	11/2/2012 10:39:08 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Aniline	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Anthracene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Azobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 10:55:00 AM

Lab ID: 1210811-001

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Carbazole	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/21/2012 11:36:12 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Chrysene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/21/2012 11:36:12 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/21/2012 11:36:12 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Fluorene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Isophorone	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Naphthalene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 10:55:00 AM

Lab ID: 1210811-001

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/21/2012 11:36:12 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/21/2012 11:36:12 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Phenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Pyrene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Pyridine	ND	5.0		mg/Kg	1	10/21/2012 11:36:12 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/21/2012 11:36:12 PM
Surr: 2,4,6-Tribromophenol	113	21.3-145		%REC	1	10/21/2012 11:36:12 PM
Surr: 2-Fluorobiphenyl	105	20-131		%REC	1	10/21/2012 11:36:12 PM
Surr: 2-Fluorophenol	87.6	11.9-130		%REC	1	10/21/2012 11:36:12 PM
Surr: 4-Terphenyl-d14	129	25.1-149		%REC	1	10/21/2012 11:36:12 PM
Surr: Nitrobenzene-d5	97.8	25.6-137		%REC	1	10/21/2012 11:36:12 PM
Surr: Phenol-d5	95.1	20.3-132		%REC	1	10/21/2012 11:36:12 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00139	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Toluene	0.00215	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Ethylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Xylenes, Total	ND	0.00153		mg/Kg	1	10/18/2012 12:09:33 AM
Methyl tert-butyl ether (MTBE)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2,4-Trimethylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,3,5-Trimethylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dichloroethane (EDC)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dibromoethane (EDB)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Naphthalene	ND	0.00153		mg/Kg	1	10/18/2012 12:09:33 AM
1-Methylnaphthalene	ND	0.00306		mg/Kg	1	10/18/2012 12:09:33 AM
2-Methylnaphthalene	ND	0.00306		mg/Kg	1	10/18/2012 12:09:33 AM
Acetone	0.0395	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromodichloromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromoform	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Bromomethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2-Butanone	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
Carbon tetrachloride	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Chlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Chloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 10:55:00 AM

Lab ID: 1210811-001

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Chloromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2-Chlorotoluene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Carbon disulfide	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
4-Chlorotoluene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
cis-1,2-DCE	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
cis-1,3-Dichloropropene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dibromo-3-chloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Dibromochloromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Dibromomethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,3-Dichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,4-Dichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Dichlorodifluoromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1-Dichloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1-Dichloroethene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2-Dichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,3-Dichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2,2-Dichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1-Dichloropropene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Hexachlorobutadiene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Isopropylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
4-Isopropyltoluene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Methylene chloride	ND	0.00230		mg/Kg	1	10/18/2012 12:09:33 AM
n-Butylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
2-Hexanone	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
n-Propylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
sec-Butylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Styrene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
4-Methyl-2-pentanone	ND	0.00766		mg/Kg	1	10/18/2012 12:09:33 AM
tert-Butylbenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,1,2-Tetrachloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,2,2-Tetrachloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Tetrachloroethene (PCE)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
trans-1,2-DCE	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
trans-1,3-Dichloropropene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2,3-Trichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,2,4-Trichlorobenzene	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,1-Trichloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
1,1,2-Trichloroethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Trichloroethene (TCE)	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Trichlorofluoromethane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 10:55:00 AM

Lab ID: 1210811-001

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Vinyl chloride	ND	0.000766		mg/Kg	1	10/18/2012 12:09:33 AM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	1	10/18/2012 12:09:33 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/18/2012 12:09:33 AM
Surr: Dibromofluoromethane	117	70-130		%REC	1	10/18/2012 12:09:33 AM
Surr: Toluene-d8	94.5	70-130		%REC	1	10/18/2012 12:09:33 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:05:00 AM

Lab ID: 1210811-002

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 11:01:44 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/18/2012 11:01:44 AM
Surr: DNOP	102	77.6-140		%REC	1	10/18/2012 11:01:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 12:41:05 AM
Surr: BFB	92.5	84-116		%REC	1	10/23/2012 12:41:05 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 5:45:32 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Barium	200	1.0		mg/Kg	10	11/2/2012 3:34:47 PM
Beryllium	0.84	0.30		mg/Kg	2	11/2/2012 10:41:39 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:41:39 AM
Chromium	8.7	0.60		mg/Kg	2	11/2/2012 10:41:39 AM
Cobalt	4.3	0.60		mg/Kg	2	11/2/2012 10:41:39 AM
Iron	12000	500		mg/Kg	500	11/2/2012 3:37:14 PM
Lead	2.7	0.50		mg/Kg	2	11/2/2012 10:41:39 AM
Manganese	300	1.0		mg/Kg	10	11/2/2012 3:34:47 PM
Nickel	7.1	1.0		mg/Kg	2	11/2/2012 10:41:39 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:41:39 AM
Vanadium	16	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 10:41:39 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:05:00 AM

Lab ID: 1210811-002

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 12:05:27 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 12:05:27 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 12:05:27 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 12:05:27 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:05:00 AM

Lab ID: 1210811-002

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 12:05:27 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 12:05:27 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 12:05:27 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 12:05:27 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 12:05:27 AM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/22/2012 12:05:27 AM
Surr: 2-Fluorobiphenyl	89.0	20-131		%REC	1	10/22/2012 12:05:27 AM
Surr: 2-Fluorophenol	78.4	11.9-130		%REC	1	10/22/2012 12:05:27 AM
Surr: 4-Terphenyl-d14	72.6	25.1-149		%REC	1	10/22/2012 12:05:27 AM
Surr: Nitrobenzene-d5	96.4	25.6-137		%REC	1	10/22/2012 12:05:27 AM
Surr: Phenol-d5	84.1	20.3-132		%REC	1	10/22/2012 12:05:27 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00193	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Toluene	0.00164	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Ethylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Xylenes, Total	ND	0.00154		mg/Kg	1	10/17/2012 3:26:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2,4-Trimethylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,3,5-Trimethylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dichloroethane (EDC)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dibromoethane (EDB)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Naphthalene	ND	0.00154		mg/Kg	1	10/17/2012 3:26:38 PM
1-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/17/2012 3:26:38 PM
2-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/17/2012 3:26:38 PM
Acetone	0.0326	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromodichloromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromoform	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Bromomethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2-Butanone	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
Carbon tetrachloride	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Chlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Chloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:05:00 AM

Lab ID: 1210811-002

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Chloromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2-Chlorotoluene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Carbon disulfide	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
4-Chlorotoluene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
cis-1,2-DCE	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
cis-1,3-Dichloropropene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dibromo-3-chloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Dibromochloromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Dibromomethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,3-Dichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,4-Dichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Dichlorodifluoromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1-Dichloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1-Dichloroethene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2-Dichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,3-Dichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2,2-Dichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1-Dichloropropene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Hexachlorobutadiene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Isopropylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
4-Isopropyltoluene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Methylene chloride	ND	0.00231		mg/Kg	1	10/17/2012 3:26:38 PM
n-Butylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
2-Hexanone	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
n-Propylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
sec-Butylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Styrene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
4-Methyl-2-pentanone	ND	0.00769		mg/Kg	1	10/17/2012 3:26:38 PM
tert-Butylbenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,1,2-Tetrachloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,2,2-Tetrachloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Tetrachloroethene (PCE)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
trans-1,2-DCE	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
trans-1,3-Dichloropropene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2,3-Trichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,2,4-Trichlorobenzene	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,1-Trichloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
1,1,2-Trichloroethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Trichloroethene (TCE)	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Trichlorofluoromethane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-9 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:05:00 AM

Lab ID: 1210811-002

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Vinyl chloride	ND	0.000769		mg/Kg	1	10/17/2012 3:26:38 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	1	10/17/2012 3:26:38 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/17/2012 3:26:38 PM
Surr: Dibromofluoromethane	98.4	70-130		%REC	1	10/17/2012 3:26:38 PM
Surr: Toluene-d8	94.1	70-130		%REC	1	10/17/2012 3:26:38 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:20:00 AM

Lab ID: 1210811-003

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	45	9.8		mg/Kg	1	10/19/2012 8:07:52 PM
Motor Oil Range Organics (MRO)	230	49		mg/Kg	1	10/19/2012 8:07:52 PM
Surr: DNOP	105	77.6-140		%REC	1	10/19/2012 8:07:52 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 1:09:44 AM
Surr: BFB	92.9	84-116		%REC	1	10/23/2012 1:09:44 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.20	0.033		mg/kg	1	10/23/2012 5:47:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Barium	590	2.0		mg/Kg	20	11/2/2012 3:40:07 PM
Beryllium	0.65	0.30		mg/Kg	2	11/2/2012 10:44:04 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:44:04 AM
Chromium	24	0.60		mg/Kg	2	11/2/2012 10:44:04 AM
Cobalt	5.0	0.60		mg/Kg	2	11/2/2012 10:44:04 AM
Iron	14000	500		mg/Kg	500	11/2/2012 3:42:33 PM
Lead	9.1	0.50		mg/Kg	2	11/2/2012 10:44:04 AM
Manganese	560	2.0		mg/Kg	20	11/2/2012 3:40:07 PM
Nickel	14	1.0		mg/Kg	2	11/2/2012 10:44:04 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:44:04 AM
Vanadium	24	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
Zinc	70	5.0		mg/Kg	2	11/2/2012 10:44:04 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Acenaphthylene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Aniline	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Anthracene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Azobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Benzoic acid	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM

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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:20:00 AM

Lab ID: 1210811-003

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 1:33:01 AM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Carbazole	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/22/2012 1:33:01 AM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Chrysene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Dibenzofuran	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/22/2012 1:33:01 AM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/22/2012 1:33:01 AM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
Fluoranthene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Fluorene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Hexachloroethane	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Isophorone	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2-Methylphenol	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Naphthalene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:20:00 AM

Lab ID: 1210811-003

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 1:33:01 AM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
Nitrobenzene	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/22/2012 1:33:01 AM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/22/2012 1:33:01 AM
Phenanthrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Phenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Pyrene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Pyridine	ND	2.5		mg/Kg	1	10/22/2012 1:33:01 AM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/22/2012 1:33:01 AM
Surr: 2,4,6-Tribromophenol	89.3	21.3-145		%REC	1	10/22/2012 1:33:01 AM
Surr: 2-Fluorobiphenyl	94.2	20-131		%REC	1	10/22/2012 1:33:01 AM
Surr: 2-Fluorophenol	63.5	11.9-130		%REC	1	10/22/2012 1:33:01 AM
Surr: 4-Terphenyl-d14	97.9	25.1-149		%REC	1	10/22/2012 1:33:01 AM
Surr: Nitrobenzene-d5	80.1	25.6-137		%REC	1	10/22/2012 1:33:01 AM
Surr: Phenol-d5	76.9	20.3-132		%REC	1	10/22/2012 1:33:01 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00176	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Toluene	0.00562	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Ethylbenzene	0.00322	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Xylenes, Total	0.0189	0.00178		mg/Kg	1	10/18/2012 12:47:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2,4-Trimethylbenzene	0.00282	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,3,5-Trimethylbenzene	0.00105	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dichloroethane (EDC)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dibromoethane (EDB)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Naphthalene	ND	0.00178		mg/Kg	1	10/18/2012 12:47:54 PM
1-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/18/2012 12:47:54 PM
2-Methylnaphthalene	ND	0.00356		mg/Kg	1	10/18/2012 12:47:54 PM
Acetone	0.146	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromodichloromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromoform	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Bromomethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2-Butanone	ND	0.00890		mg/Kg	1	10/18/2012 12:47:54 PM
Carbon tetrachloride	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Chlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Chloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:20:00 AM

Lab ID: 1210811-003

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Chloromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2-Chlorotoluene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Carbon disulfide	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
4-Chlorotoluene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
cis-1,2-DCE	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
cis-1,3-Dichloropropene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dibromo-3-chloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Dibromochloromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Dibromomethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,3-Dichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,4-Dichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Dichlorodifluoromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1-Dichloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1-Dichloroethene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2-Dichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,3-Dichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2,2-Dichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1-Dichloropropene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Hexachlorobutadiene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Isopropylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
4-Isopropyltoluene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Methylene chloride	ND	0.00267		mg/Kg	1	10/18/2012 12:47:54 PM
n-Butylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
2-Hexanone	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
n-Propylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
sec-Butylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Styrene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
4-Methyl-2-pentanone	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
tert-Butylbenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,1,2-Tetrachloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,2,2-Tetrachloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Tetrachloroethene (PCE)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
trans-1,2-DCE	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
trans-1,3-Dichloropropene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2,3-Trichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,2,4-Trichlorobenzene	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,1-Trichloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
1,1,2-Trichloroethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Trichloroethene (TCE)	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Trichlorofluoromethane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:20:00 AM

Lab ID: 1210811-003

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Vinyl chloride	ND	0.000890		mg/Kg	1	10/18/2012 12:47:54 PM
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%REC	1	10/18/2012 12:47:54 PM
Surr: 4-Bromofluorobenzene	130	70-130	S	%REC	1	10/18/2012 12:47:54 PM
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/18/2012 12:47:54 PM
Surr: Toluene-d8	93.5	70-130		%REC	1	10/18/2012 12:47:54 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:30:00 AM

Lab ID: 1210811-004

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	42	9.8		mg/Kg	1	10/19/2012 8:29:31 PM
Motor Oil Range Organics (MRO)	210	49		mg/Kg	1	10/19/2012 8:29:31 PM
Surr: DNOP	100	77.6-140		%REC	1	10/19/2012 8:29:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 1:38:24 AM
Surr: BFB	93.1	84-116		%REC	1	10/23/2012 1:38:24 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.091	0.033		mg/kg	1	10/23/2012 5:49:04 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Barium	580	2.0		mg/Kg	20	11/2/2012 3:45:28 PM
Beryllium	0.54	0.30		mg/Kg	2	11/2/2012 10:46:49 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:46:49 AM
Chromium	15	0.60		mg/Kg	2	11/2/2012 10:46:49 AM
Cobalt	4.2	0.60		mg/Kg	2	11/2/2012 10:46:49 AM
Iron	7400	500		mg/Kg	500	11/2/2012 3:47:54 PM
Lead	3.0	0.50		mg/Kg	2	11/2/2012 10:46:49 AM
Manganese	790	2.0		mg/Kg	20	11/2/2012 3:45:28 PM
Nickel	11	1.0		mg/Kg	2	11/2/2012 10:46:49 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:46:49 AM
Vanadium	22	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
Zinc	26	5.0		mg/Kg	2	11/2/2012 10:46:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Acenaphthylene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Aniline	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Anthracene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Azobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzoic acid	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:30:00 AM

Lab ID: 1210811-004

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Carbazole	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/22/2012 2:02:14 AM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Chrysene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Dibenzofuran	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/22/2012 2:02:14 AM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/22/2012 2:02:14 AM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
Fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Fluorene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Hexachloroethane	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Isophorone	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Methylphenol	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Naphthalene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:30:00 AM

Lab ID: 1210811-004

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
Nitrobenzene	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/22/2012 2:02:14 AM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/22/2012 2:02:14 AM
Phenanthrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Phenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Pyrene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Pyridine	ND	5.0		mg/Kg	1	10/22/2012 2:02:14 AM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 2:02:14 AM
Surr: 2,4,6-Tribromophenol	106	21.3-145		%REC	1	10/22/2012 2:02:14 AM
Surr: 2-Fluorobiphenyl	101	20-131		%REC	1	10/22/2012 2:02:14 AM
Surr: 2-Fluorophenol	90.3	11.9-130		%REC	1	10/22/2012 2:02:14 AM
Surr: 4-Terphenyl-d14	128	25.1-149		%REC	1	10/22/2012 2:02:14 AM
Surr: Nitrobenzene-d5	96.2	25.6-137		%REC	1	10/22/2012 2:02:14 AM
Surr: Phenol-d5	95.3	20.3-132		%REC	1	10/22/2012 2:02:14 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.000934	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Toluene	0.00346	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Ethylbenzene	0.000992	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Xylenes, Total	0.00384	0.00165		mg/Kg	1	10/17/2012 4:28:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2,4-Trimethylbenzene	0.00143	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,3,5-Trimethylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dichloroethane (EDC)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dibromoethane (EDB)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/17/2012 4:28:16 PM
1-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/17/2012 4:28:16 PM
2-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/17/2012 4:28:16 PM
Acetone	0.0464	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromodichloromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromoform	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Bromomethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2-Butanone	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
Carbon tetrachloride	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Chlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Chloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:30:00 AM

Lab ID: 1210811-004

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Chloromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2-Chlorotoluene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Carbon disulfide	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
4-Chlorotoluene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
cis-1,2-DCE	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
cis-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Dibromochloromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Dibromomethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,3-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,4-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Dichlorodifluoromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1-Dichloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1-Dichloroethene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,3-Dichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1-Dichloropropene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Hexachlorobutadiene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Isopropylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
4-Isopropyltoluene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Methylene chloride	ND	0.00248		mg/Kg	1	10/17/2012 4:28:16 PM
n-Butylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
2-Hexanone	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
n-Propylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
sec-Butylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Styrene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
4-Methyl-2-pentanone	ND	0.00827		mg/Kg	1	10/17/2012 4:28:16 PM
tert-Butylbenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Tetrachloroethene (PCE)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
trans-1,2-DCE	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
trans-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2,3-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,2,4-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,1-Trichloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
1,1,2-Trichloroethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Trichloroethene (TCE)	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Trichlorofluoromethane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-10 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 11:30:00 AM

Lab ID: 1210811-004

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Vinyl chloride	ND	0.000827		mg/Kg	1	10/17/2012 4:28:16 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	10/17/2012 4:28:16 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/17/2012 4:28:16 PM
Surr: Dibromofluoromethane	117	70-130		%REC	1	10/17/2012 4:28:16 PM
Surr: Toluene-d8	107	70-130		%REC	1	10/17/2012 4:28:16 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:05:00 PM

Lab ID: 1210811-005

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	87	9.8		mg/Kg	1	10/19/2012 9:02:58 AM
Motor Oil Range Organics (MRO)	86	49		mg/Kg	1	10/19/2012 9:02:58 AM
Surr: DNOP	103	77.6-140		%REC	1	10/19/2012 9:02:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 2:07:11 AM
Surr: BFB	89.6	84-116		%REC	2	10/23/2012 2:07:11 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.84	0.16		mg/kg	5	10/23/2012 8:00:33 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Barium	510	2.0		mg/Kg	20	11/2/2012 3:50:46 PM
Beryllium	0.77	0.30		mg/Kg	2	11/2/2012 10:49:22 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 10:49:22 AM
Chromium	15	0.60		mg/Kg	2	11/2/2012 10:49:22 AM
Cobalt	5.4	0.60		mg/Kg	2	11/2/2012 10:49:22 AM
Iron	14000	500		mg/Kg	500	11/2/2012 4:02:06 PM
Lead	3.5	0.50		mg/Kg	2	11/2/2012 10:49:22 AM
Manganese	620	2.0		mg/Kg	20	11/2/2012 3:50:46 PM
Nickel	8.8	1.0		mg/Kg	2	11/2/2012 10:49:22 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 10:49:22 AM
Vanadium	25	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
Zinc	39	5.0		mg/Kg	2	11/2/2012 10:49:22 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM

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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:05:00 PM

Lab ID: 1210811-005

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 2:31:21 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 2:31:21 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 2:31:21 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 2:31:21 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:05:00 PM

Lab ID: 1210811-005

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 2:31:21 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 2:31:21 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 2:31:21 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 2:31:21 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 2:31:21 AM
Surr: 2,4,6-Tribromophenol	97.9	21.3-145		%REC	1	10/22/2012 2:31:21 AM
Surr: 2-Fluorobiphenyl	90.9	20-131		%REC	1	10/22/2012 2:31:21 AM
Surr: 2-Fluorophenol	81.9	11.9-130		%REC	1	10/22/2012 2:31:21 AM
Surr: 4-Terphenyl-d14	91.0	25.1-149		%REC	1	10/22/2012 2:31:21 AM
Surr: Nitrobenzene-d5	95.4	25.6-137		%REC	1	10/22/2012 2:31:21 AM
Surr: Phenol-d5	84.2	20.3-132		%REC	1	10/22/2012 2:31:21 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00207	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Toluene	0.00414	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Ethylbenzene	0.00933	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Xylenes, Total	0.0565	0.00195		mg/Kg	1	10/17/2012 4:59:03 PM
Methyl tert-butyl ether (MTBE)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2,4-Trimethylbenzene	0.00219	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,3,5-Trimethylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dichloroethane (EDC)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dibromoethane (EDB)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Naphthalene	ND	0.00195		mg/Kg	1	10/17/2012 4:59:03 PM
1-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/17/2012 4:59:03 PM
2-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/17/2012 4:59:03 PM
Acetone	0.329	0.00976	E	mg/Kg	1	10/17/2012 4:59:03 PM
Bromobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Bromodichloromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Bromoform	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Bromomethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2-Butanone	0.0102	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
Carbon tetrachloride	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Chlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Chloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:05:00 PM

Lab ID: 1210811-005

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Chloromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2-Chlorotoluene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Carbon disulfide	ND	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
4-Chlorotoluene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
cis-1,2-DCE	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
cis-1,3-Dichloropropene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dibromo-3-chloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Dibromochloromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Dibromomethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,3-Dichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,4-Dichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Dichlorodifluoromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1-Dichloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1-Dichloroethene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2-Dichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,3-Dichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2,2-Dichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1-Dichloropropene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Hexachlorobutadiene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Isopropylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
4-Isopropyltoluene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Methylene chloride	ND	0.00293		mg/Kg	1	10/17/2012 4:59:03 PM
n-Butylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
2-Hexanone	ND	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
n-Propylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
sec-Butylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Styrene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
4-Methyl-2-pentanone	ND	0.00976		mg/Kg	1	10/17/2012 4:59:03 PM
tert-Butylbenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,1,2-Tetrachloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,2,2-Tetrachloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Tetrachloroethene (PCE)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
trans-1,2-DCE	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
trans-1,3-Dichloropropene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2,3-Trichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,2,4-Trichlorobenzene	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,1-Trichloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
1,1,2-Trichloroethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Trichloroethene (TCE)	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Trichlorofluoromethane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:05:00 PM

Lab ID: 1210811-005

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Vinyl chloride	ND	0.000976		mg/Kg	1	10/17/2012 4:59:03 PM
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	10/17/2012 4:59:03 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	10/17/2012 4:59:03 PM
Surr: Dibromofluoromethane	113	70-130		%REC	1	10/17/2012 4:59:03 PM
Surr: Toluene-d8	99.1	70-130		%REC	1	10/17/2012 4:59:03 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:20:00 PM

Lab ID: 1210811-006

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	120	10		mg/Kg	1	10/19/2012 9:24:38 AM
Motor Oil Range Organics (MRO)	120	51		mg/Kg	1	10/19/2012 9:24:38 AM
Surr: DNOP	103	77.6-140		%REC	1	10/19/2012 9:24:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 2:35:56 AM
Surr: BFB	89.2	84-116		%REC	2	10/23/2012 2:35:56 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.19	0.033		mg/kg	1	10/23/2012 5:52:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Barium	590	2.0		mg/Kg	20	11/2/2012 4:05:01 PM
Beryllium	0.61	0.30		mg/Kg	2	11/2/2012 11:00:53 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:00:53 AM
Chromium	12	0.60		mg/Kg	2	11/2/2012 11:00:53 AM
Cobalt	4.0	0.60		mg/Kg	2	11/2/2012 11:00:53 AM
Iron	7400	500		mg/Kg	500	11/2/2012 4:09:11 PM
Lead	1.4	0.50		mg/Kg	2	11/2/2012 11:00:53 AM
Manganese	400	2.0		mg/Kg	20	11/2/2012 4:05:01 PM
Nickel	7.1	1.0		mg/Kg	2	11/2/2012 11:00:53 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:00:53 AM
Vanadium	18	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
Zinc	44	5.0		mg/Kg	2	11/2/2012 11:00:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:20:00 PM

Lab ID: 1210811-006

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 3:00:24 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 3:00:24 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 3:00:24 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 3:00:24 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:20:00 PM

Lab ID: 1210811-006

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 3:00:24 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 3:00:24 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:00:24 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 3:00:24 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:00:24 AM
Surr: 2,4,6-Tribromophenol	89.5	21.3-145		%REC	1	10/22/2012 3:00:24 AM
Surr: 2-Fluorobiphenyl	87.7	20-131		%REC	1	10/22/2012 3:00:24 AM
Surr: 2-Fluorophenol	82.9	11.9-130		%REC	1	10/22/2012 3:00:24 AM
Surr: 4-Terphenyl-d14	72.3	25.1-149		%REC	1	10/22/2012 3:00:24 AM
Surr: Nitrobenzene-d5	95.3	25.6-137		%REC	1	10/22/2012 3:00:24 AM
Surr: Phenol-d5	79.9	20.3-132		%REC	1	10/22/2012 3:00:24 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00131	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Toluene	0.00804	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Ethylbenzene	0.00229	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Xylenes, Total	0.00902	0.00153		mg/Kg	1	10/17/2012 5:29:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2,4-Trimethylbenzene	0.00449	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,3,5-Trimethylbenzene	0.00165	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dichloroethane (EDC)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dibromoethane (EDB)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Naphthalene	ND	0.00153		mg/Kg	1	10/17/2012 5:29:46 PM
1-Methylnaphthalene	ND	0.00307		mg/Kg	1	10/17/2012 5:29:46 PM
2-Methylnaphthalene	ND	0.00307		mg/Kg	1	10/17/2012 5:29:46 PM
Acetone	0.0686	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromodichloromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromoform	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Bromomethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2-Butanone	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
Carbon tetrachloride	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Chlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Chloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:20:00 PM

Lab ID: 1210811-006

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Chloromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2-Chlorotoluene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Carbon disulfide	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
4-Chlorotoluene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
cis-1,2-DCE	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
cis-1,3-Dichloropropene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dibromo-3-chloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Dibromochloromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Dibromomethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,3-Dichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,4-Dichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Dichlorodifluoromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1-Dichloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1-Dichloroethene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2-Dichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,3-Dichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2,2-Dichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1-Dichloropropene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Hexachlorobutadiene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Isopropylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
4-Isopropyltoluene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Methylene chloride	ND	0.00230		mg/Kg	1	10/17/2012 5:29:46 PM
n-Butylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
2-Hexanone	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
n-Propylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
sec-Butylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Styrene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
4-Methyl-2-pentanone	ND	0.00767		mg/Kg	1	10/17/2012 5:29:46 PM
tert-Butylbenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,1,2-Tetrachloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,2,2-Tetrachloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Tetrachloroethene (PCE)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
trans-1,2-DCE	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
trans-1,3-Dichloropropene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2,3-Trichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,2,4-Trichlorobenzene	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,1-Trichloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
1,1,2-Trichloroethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Trichloroethene (TCE)	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Trichlorofluoromethane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-11 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 12:20:00 PM

Lab ID: 1210811-006

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Vinyl chloride	ND	0.000767		mg/Kg	1	10/17/2012 5:29:46 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%REC	1	10/17/2012 5:29:46 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/17/2012 5:29:46 PM
Surr: Dibromofluoromethane	115	70-130		%REC	1	10/17/2012 5:29:46 PM
Surr: Toluene-d8	111	70-130		%REC	1	10/17/2012 5:29:46 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 2:45:00 PM

Lab ID: 1210811-007

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	200	10		mg/Kg	1	10/19/2012 9:46:08 AM
Motor Oil Range Organics (MRO)	150	51		mg/Kg	1	10/19/2012 9:46:08 AM
Surr: DNOP	105	77.6-140		%REC	1	10/19/2012 9:46:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 3:04:40 AM
Surr: BFB	92.8	84-116		%REC	2	10/23/2012 3:04:40 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.16	0.033		mg/kg	1	10/23/2012 5:54:35 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Barium	400	1.0		mg/Kg	10	11/2/2012 4:12:04 PM
Beryllium	0.95	0.30		mg/Kg	2	11/2/2012 11:03:20 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:03:20 AM
Chromium	15	0.60		mg/Kg	2	11/2/2012 11:03:20 AM
Cobalt	5.4	0.60		mg/Kg	2	11/2/2012 11:03:20 AM
Iron	15000	500		mg/Kg	500	11/2/2012 4:14:29 PM
Lead	1.6	0.50		mg/Kg	2	11/2/2012 11:03:20 AM
Manganese	390	1.0		mg/Kg	10	11/2/2012 4:12:04 PM
Nickel	9.9	1.0		mg/Kg	2	11/2/2012 11:03:20 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:03:20 AM
Vanadium	24	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
Zinc	61	5.0		mg/Kg	2	11/2/2012 11:03:20 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 2:45:00 PM

Lab ID: 1210811-007

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 3:29:24 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 3:29:24 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
Di-n-octyl phthalate	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 3:29:24 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dichlorophenol	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 3:29:24 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dinitrophenol	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 2:45:00 PM

Lab ID: 1210811-007

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 3:29:24 AM
4-Nitroaniline	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 3:29:24 AM
Pentachlorophenol	ND	0.81		mg/Kg	1	10/22/2012 3:29:24 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 3:29:24 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:29:24 AM
Surr: 2,4,6-Tribromophenol	86.0	21.3-145		%REC	1	10/22/2012 3:29:24 AM
Surr: 2-Fluorobiphenyl	83.6	20-131		%REC	1	10/22/2012 3:29:24 AM
Surr: 2-Fluorophenol	79.7	11.9-130		%REC	1	10/22/2012 3:29:24 AM
Surr: 4-Terphenyl-d14	73.3	25.1-149		%REC	1	10/22/2012 3:29:24 AM
Surr: Nitrobenzene-d5	94.3	25.6-137		%REC	1	10/22/2012 3:29:24 AM
Surr: Phenol-d5	78.0	20.3-132		%REC	1	10/22/2012 3:29:24 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00232	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Toluene	0.00554	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Ethylbenzene	0.0233	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Xylenes, Total	0.186	0.00178		mg/Kg	1	10/17/2012 6:00:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2,4-Trimethylbenzene	0.00394	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,3,5-Trimethylbenzene	0.00161	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dichloroethane (EDC)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dibromoethane (EDB)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Naphthalene	ND	0.00178		mg/Kg	1	10/17/2012 6:00:30 PM
1-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 6:00:30 PM
2-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 6:00:30 PM
Acetone	3.23	0.00892	E	mg/Kg	1	10/17/2012 6:00:30 PM
Bromobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Bromodichloromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Bromoform	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Bromomethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2-Butanone	0.0132	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
Carbon tetrachloride	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Chlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Chloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 2:45:00 PM

Lab ID: 1210811-007

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Chloromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2-Chlorotoluene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Carbon disulfide	ND	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
4-Chlorotoluene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
cis-1,2-DCE	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
cis-1,3-Dichloropropene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Dibromochloromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Dibromomethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,3-Dichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,4-Dichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Dichlorodifluoromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1-Dichloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1-Dichloroethene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2-Dichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,3-Dichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2,2-Dichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1-Dichloropropene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Hexachlorobutadiene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Isopropylbenzene	0.00144	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
4-Isopropyltoluene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Methylene chloride	ND	0.00268		mg/Kg	1	10/17/2012 6:00:30 PM
n-Butylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
2-Hexanone	ND	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
n-Propylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
sec-Butylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Styrene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
4-Methyl-2-pentanone	ND	0.00892		mg/Kg	1	10/17/2012 6:00:30 PM
tert-Butylbenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Tetrachloroethene (PCE)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
trans-1,2-DCE	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
trans-1,3-Dichloropropene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2,3-Trichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,2,4-Trichlorobenzene	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,1-Trichloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
1,1,2-Trichloroethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Trichloroethene (TCE)	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Trichlorofluoromethane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 2:45:00 PM

Lab ID: 1210811-007

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Vinyl chloride	ND	0.000892		mg/Kg	1	10/17/2012 6:00:30 PM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%REC	1	10/17/2012 6:00:30 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	1	10/17/2012 6:00:30 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/17/2012 6:00:30 PM
Surr: Toluene-d8	93.0	70-130		%REC	1	10/17/2012 6:00:30 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:00:00 PM

Lab ID: 1210811-008

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	190	9.6		mg/Kg	1	10/19/2012 10:07:43 AM
Motor Oil Range Organics (MRO)	190	48		mg/Kg	1	10/19/2012 10:07:43 AM
Surr: DNOP	111	77.6-140		%REC	1	10/19/2012 10:07:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/Kg	2	10/23/2012 3:33:26 AM
Surr: BFB	91.2	84-116		%REC	2	10/23/2012 3:33:26 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.12	0.033		mg/kg	1	10/23/2012 5:56:22 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Barium	440	1.0		mg/Kg	10	11/2/2012 4:17:23 PM
Beryllium	0.76	0.30		mg/Kg	2	11/2/2012 11:05:49 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:05:49 AM
Chromium	14	0.60		mg/Kg	2	11/2/2012 11:05:49 AM
Cobalt	4.9	0.60		mg/Kg	2	11/2/2012 11:05:49 AM
Iron	13000	500		mg/Kg	500	11/2/2012 4:19:48 PM
Lead	1.6	0.50		mg/Kg	2	11/2/2012 11:05:49 AM
Manganese	460	1.0		mg/Kg	10	11/2/2012 4:17:23 PM
Nickel	8.0	1.0		mg/Kg	2	11/2/2012 11:05:49 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:05:49 AM
Vanadium	24	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
Zinc	40	5.0		mg/Kg	2	11/2/2012 11:05:49 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:00:00 PM

Lab ID: 1210811-008

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 3:58:25 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 3:58:25 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 3:58:25 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 3:58:25 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:00:00 PM

Lab ID: 1210811-008

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 3:58:25 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 3:58:25 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 3:58:25 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 3:58:25 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 3:58:25 AM
Surr: 2,4,6-Tribromophenol	101	21.3-145		%REC	1	10/22/2012 3:58:25 AM
Surr: 2-Fluorobiphenyl	91.8	20-131		%REC	1	10/22/2012 3:58:25 AM
Surr: 2-Fluorophenol	81.6	11.9-130		%REC	1	10/22/2012 3:58:25 AM
Surr: 4-Terphenyl-d14	82.5	25.1-149		%REC	1	10/22/2012 3:58:25 AM
Surr: Nitrobenzene-d5	99.5	25.6-137		%REC	1	10/22/2012 3:58:25 AM
Surr: Phenol-d5	85.2	20.3-132		%REC	1	10/22/2012 3:58:25 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00191	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Toluene	0.00470	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Ethylbenzene	0.00131	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Xylenes, Total	0.00699	0.00146		mg/Kg	1	10/17/2012 7:02:10 PM
Methyl tert-butyl ether (MTBE)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2,4-Trimethylbenzene	0.00382	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,3,5-Trimethylbenzene	0.00149	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dichloroethane (EDC)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dibromoethane (EDB)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Naphthalene	ND	0.00146		mg/Kg	1	10/17/2012 7:02:10 PM
1-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 7:02:10 PM
2-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 7:02:10 PM
Acetone	0.0917	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromodichloromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromoform	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Bromomethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2-Butanone	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
Carbon tetrachloride	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Chlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Chloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:00:00 PM

Lab ID: 1210811-008

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Chloromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2-Chlorotoluene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Carbon disulfide	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
4-Chlorotoluene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
cis-1,2-DCE	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
cis-1,3-Dichloropropene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dibromo-3-chloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Dibromochloromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Dibromomethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,3-Dichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,4-Dichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Dichlorodifluoromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1-Dichloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1-Dichloroethene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2-Dichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,3-Dichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2,2-Dichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1-Dichloropropene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Hexachlorobutadiene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Isopropylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
4-Isopropyltoluene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Methylene chloride	ND	0.00219		mg/Kg	1	10/17/2012 7:02:10 PM
n-Butylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
2-Hexanone	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
n-Propylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
sec-Butylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Styrene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
4-Methyl-2-pentanone	ND	0.00729		mg/Kg	1	10/17/2012 7:02:10 PM
tert-Butylbenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,1,2-Tetrachloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,2,2-Tetrachloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Tetrachloroethene (PCE)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
trans-1,2-DCE	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
trans-1,3-Dichloropropene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2,3-Trichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,2,4-Trichlorobenzene	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,1-Trichloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
1,1,2-Trichloroethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Trichloroethene (TCE)	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Trichlorofluoromethane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-12 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:00:00 PM

Lab ID: 1210811-008

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Vinyl chloride	ND	0.000729		mg/Kg	1	10/17/2012 7:02:10 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/17/2012 7:02:10 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	1	10/17/2012 7:02:10 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/17/2012 7:02:10 PM
Surr: Toluene-d8	88.3	70-130		%REC	1	10/17/2012 7:02:10 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:30:00 PM

Lab ID: 1210811-009

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	58	9.8		mg/Kg	1	10/19/2012 8:19:39 AM
Motor Oil Range Organics (MRO)	94	49		mg/Kg	1	10/19/2012 8:19:39 AM
Surr: DNOP	102	77.6-140		%REC	1	10/19/2012 8:19:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 4:02:08 AM
Surr: BFB	91.2	84-116		%REC	1	10/23/2012 4:02:08 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.050	0.033		mg/kg	1	10/23/2012 6:01:43 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Barium	530	2.0		mg/Kg	20	11/2/2012 4:25:06 PM
Beryllium	1.0	0.30		mg/Kg	2	11/2/2012 11:08:19 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:08:19 AM
Chromium	11	0.60		mg/Kg	2	11/2/2012 11:08:19 AM
Cobalt	5.4	0.60		mg/Kg	2	11/2/2012 11:08:19 AM
Iron	14000	500		mg/Kg	500	11/2/2012 4:27:31 PM
Lead	1.9	0.50		mg/Kg	2	11/2/2012 11:08:19 AM
Manganese	300	1.0		mg/Kg	10	11/2/2012 4:22:41 PM
Nickel	8.9	1.0		mg/Kg	2	11/2/2012 11:08:19 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:08:19 AM
Vanadium	20	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
Zinc	33	5.0		mg/Kg	2	11/2/2012 11:08:19 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:30:00 PM

Lab ID: 1210811-009

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	1.5	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 4:27:35 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 4:27:35 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 4:27:35 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:30:00 PM

Lab ID: 1210811-009

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 4:27:35 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 4:27:35 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 4:27:35 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 4:27:35 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:27:35 AM
Surr: 2,4,6-Tribromophenol	93.5	21.3-145		%REC	1	10/22/2012 4:27:35 AM
Surr: 2-Fluorobiphenyl	91.4	20-131		%REC	1	10/22/2012 4:27:35 AM
Surr: 2-Fluorophenol	86.9	11.9-130		%REC	1	10/22/2012 4:27:35 AM
Surr: 4-Terphenyl-d14	92.8	25.1-149		%REC	1	10/22/2012 4:27:35 AM
Surr: Nitrobenzene-d5	102	25.6-137		%REC	1	10/22/2012 4:27:35 AM
Surr: Phenol-d5	88.1	20.3-132		%REC	1	10/22/2012 4:27:35 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00171	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Toluene	0.00574	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Ethylbenzene	0.00165	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Xylenes, Total	0.00542	0.00149		mg/Kg	1	10/17/2012 7:32:57 PM
Methyl tert-butyl ether (MTBE)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2,4-Trimethylbenzene	0.00194	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,3,5-Trimethylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dichloroethane (EDC)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dibromoethane (EDB)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Naphthalene	ND	0.00149		mg/Kg	1	10/17/2012 7:32:57 PM
1-Methylnaphthalene	ND	0.00298		mg/Kg	1	10/17/2012 7:32:57 PM
2-Methylnaphthalene	ND	0.00298		mg/Kg	1	10/17/2012 7:32:57 PM
Acetone	0.0471	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromodichloromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromoform	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Bromomethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2-Butanone	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
Carbon tetrachloride	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Chlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Chloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:30:00 PM

Lab ID: 1210811-009

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Chloromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2-Chlorotoluene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Carbon disulfide	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
4-Chlorotoluene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
cis-1,2-DCE	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
cis-1,3-Dichloropropene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dibromo-3-chloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Dibromochloromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Dibromomethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,3-Dichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,4-Dichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Dichlorodifluoromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1-Dichloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1-Dichloroethene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2-Dichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,3-Dichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2,2-Dichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1-Dichloropropene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Hexachlorobutadiene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Isopropylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
4-Isopropyltoluene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Methylene chloride	ND	0.00223		mg/Kg	1	10/17/2012 7:32:57 PM
n-Butylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
2-Hexanone	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
n-Propylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
sec-Butylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Styrene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
4-Methyl-2-pentanone	ND	0.00745		mg/Kg	1	10/17/2012 7:32:57 PM
tert-Butylbenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,1,2-Tetrachloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,2,2-Tetrachloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Tetrachloroethene (PCE)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
trans-1,2-DCE	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
trans-1,3-Dichloropropene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2,3-Trichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,2,4-Trichlorobenzene	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,1-Trichloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
1,1,2-Trichloroethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Trichloroethene (TCE)	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Trichlorofluoromethane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:30:00 PM

Lab ID: 1210811-009

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Vinyl chloride	ND	0.000745		mg/Kg	1	10/17/2012 7:32:57 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/17/2012 7:32:57 PM
Surr: 4-Bromofluorobenzene	85.9	70-130		%REC	1	10/17/2012 7:32:57 PM
Surr: Dibromofluoromethane	117	70-130		%REC	1	10/17/2012 7:32:57 PM
Surr: Toluene-d8	106	70-130		%REC	1	10/17/2012 7:32:57 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-010

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 11:42:59 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/18/2012 11:42:59 AM
Surr: DNOP	95.9	77.6-140		%REC	1	10/18/2012 11:42:59 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2012 4:59:28 AM
Surr: BFB	91.9	84-116		%REC	1	10/23/2012 4:59:28 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:03:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	13		mg/Kg	5	11/2/2012 4:43:30 PM
Arsenic	ND	13		mg/Kg	5	11/2/2012 4:43:30 PM
Barium	360	2.0		mg/Kg	20	11/2/2012 4:45:54 PM
Beryllium	0.75	0.75		mg/Kg	5	11/2/2012 4:43:30 PM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 4:43:30 PM
Chromium	11	1.5		mg/Kg	5	11/2/2012 4:43:30 PM
Cobalt	4.4	1.5		mg/Kg	5	11/2/2012 4:43:30 PM
Iron	13000	500		mg/Kg	500	11/2/2012 4:48:20 PM
Lead	4.1	1.3		mg/Kg	5	11/2/2012 4:43:30 PM
Manganese	430	2.0		mg/Kg	20	11/2/2012 4:45:54 PM
Nickel	7.6	2.5		mg/Kg	5	11/2/2012 4:43:30 PM
Selenium	ND	13		mg/Kg	5	11/2/2012 4:43:30 PM
Silver	ND	1.3		mg/Kg	5	11/2/2012 4:43:30 PM
Vanadium	19	13		mg/Kg	5	11/2/2012 4:43:30 PM
Zinc	16	13		mg/Kg	5	11/2/2012 4:43:30 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-010

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 4:56:48 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 4:56:48 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 4:56:48 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 4:56:48 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-010

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 4:56:48 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 4:56:48 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 4:56:48 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 4:56:48 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 4:56:48 AM
Surr: 2,4,6-Tribromophenol	88.5	21.3-145		%REC	1	10/22/2012 4:56:48 AM
Surr: 2-Fluorobiphenyl	90.7	20-131		%REC	1	10/22/2012 4:56:48 AM
Surr: 2-Fluorophenol	82.6	11.9-130		%REC	1	10/22/2012 4:56:48 AM
Surr: 4-Terphenyl-d14	74.6	25.1-149		%REC	1	10/22/2012 4:56:48 AM
Surr: Nitrobenzene-d5	97.6	25.6-137		%REC	1	10/22/2012 4:56:48 AM
Surr: Phenol-d5	89.2	20.3-132		%REC	1	10/22/2012 4:56:48 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Toluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Ethylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Xylenes, Total	ND	0.00179		mg/Kg	1	10/17/2012 8:03:39 PM
Methyl tert-butyl ether (MTBE)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2,4-Trimethylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,3,5-Trimethylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dichloroethane (EDC)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dibromoethane (EDB)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Naphthalene	ND	0.00179		mg/Kg	1	10/17/2012 8:03:39 PM
1-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 8:03:39 PM
2-Methylnaphthalene	ND	0.00357		mg/Kg	1	10/17/2012 8:03:39 PM
Acetone	0.0202	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromodichloromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromoform	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Bromomethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2-Butanone	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
Carbon tetrachloride	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Chlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Chloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM

Qualifiers:

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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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-010

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Chloromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2-Chlorotoluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Carbon disulfide	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
4-Chlorotoluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
cis-1,2-DCE	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
cis-1,3-Dichloropropene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dibromo-3-chloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Dibromochloromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Dibromomethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,3-Dichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,4-Dichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Dichlorodifluoromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1-Dichloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1-Dichloroethene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2-Dichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,3-Dichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2,2-Dichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1-Dichloropropene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Hexachlorobutadiene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Isopropylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
4-Isopropyltoluene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Methylene chloride	ND	0.00268		mg/Kg	1	10/17/2012 8:03:39 PM
n-Butylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
2-Hexanone	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
n-Propylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
sec-Butylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Styrene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
4-Methyl-2-pentanone	ND	0.00893		mg/Kg	1	10/17/2012 8:03:39 PM
tert-Butylbenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,1,2-Tetrachloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,2,2-Tetrachloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Tetrachloroethene (PCE)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
trans-1,2-DCE	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
trans-1,3-Dichloropropene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2,3-Trichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,2,4-Trichlorobenzene	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,1-Trichloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
1,1,2-Trichloroethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Trichloroethene (TCE)	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Trichlorofluoromethane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-010

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Vinyl chloride	ND	0.000893		mg/Kg	1	10/17/2012 8:03:39 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	10/17/2012 8:03:39 PM
Surr: 4-Bromofluorobenzene	84.0	70-130		%REC	1	10/17/2012 8:03:39 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/17/2012 8:03:39 PM
Surr: Toluene-d8	104	70-130		%REC	1	10/17/2012 8:03:39 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-011

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 12:07:39 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 12:07:39 PM
Surr: DNOP	99.2	77.6-140		%REC	1	10/18/2012 12:07:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 3:56:01 PM
Surr: BFB	88.0	84-116		%REC	1	10/24/2012 3:56:01 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:05:24 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Barium	240	1.0		mg/Kg	10	11/2/2012 4:51:10 PM
Beryllium	0.81	0.30		mg/Kg	2	11/2/2012 11:15:00 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:15:00 AM
Chromium	11	0.60		mg/Kg	2	11/2/2012 11:15:00 AM
Cobalt	5.0	0.60		mg/Kg	2	11/2/2012 11:15:00 AM
Iron	15000	500		mg/Kg	500	11/2/2012 4:53:33 PM
Lead	1.0	0.50		mg/Kg	2	11/2/2012 11:15:00 AM
Manganese	350	1.0		mg/Kg	10	11/2/2012 4:51:10 PM
Nickel	8.3	1.0		mg/Kg	2	11/2/2012 11:15:00 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:15:00 AM
Vanadium	28	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
Zinc	21	5.0		mg/Kg	2	11/2/2012 11:15:00 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM

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- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-011

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 5:25:56 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 5:25:56 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 5:25:56 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 5:25:56 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM

Qualifiers:

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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
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2') DUP

Project: SWMU NO.1

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Lab ID: 1210811-011

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 5:25:56 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 5:25:56 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:25:56 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 5:25:56 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:25:56 AM
Surr: 2,4,6-Tribromophenol	87.0	21.3-145		%REC	1	10/22/2012 5:25:56 AM
Surr: 2-Fluorobiphenyl	89.9	20-131		%REC	1	10/22/2012 5:25:56 AM
Surr: 2-Fluorophenol	83.0	11.9-130		%REC	1	10/22/2012 5:25:56 AM
Surr: 4-Terphenyl-d14	82.7	25.1-149		%REC	1	10/22/2012 5:25:56 AM
Surr: Nitrobenzene-d5	98.6	25.6-137		%REC	1	10/22/2012 5:25:56 AM
Surr: Phenol-d5	86.9	20.3-132		%REC	1	10/22/2012 5:25:56 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Toluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Ethylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Xylenes, Total	ND	0.00171		mg/Kg	1	10/17/2012 8:34:21 PM
Methyl tert-butyl ether (MTBE)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2,4-Trimethylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,3,5-Trimethylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dichloroethane (EDC)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dibromoethane (EDB)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Naphthalene	ND	0.00171		mg/Kg	1	10/17/2012 8:34:21 PM
1-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/17/2012 8:34:21 PM
2-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/17/2012 8:34:21 PM
Acetone	0.0139	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromodichloromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromoform	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Bromomethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2-Butanone	ND	0.00854		mg/Kg	1	10/17/2012 8:34:21 PM
Carbon tetrachloride	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Chlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Chloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-011

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Chloromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2-Chlorotoluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Carbon disulfide	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
4-Chlorotoluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
cis-1,2-DCE	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
cis-1,3-Dichloropropene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dibromo-3-chloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Dibromochloromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Dibromomethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,3-Dichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,4-Dichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Dichlorodifluoromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1-Dichloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1-Dichloroethene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2-Dichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,3-Dichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2,2-Dichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1-Dichloropropene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Hexachlorobutadiene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Isopropylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
4-Isopropyltoluene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Methylene chloride	ND	0.00256		mg/Kg	1	10/17/2012 8:34:21 PM
n-Butylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
2-Hexanone	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
n-Propylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
sec-Butylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Styrene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
4-Methyl-2-pentanone	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
tert-Butylbenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,1,2-Tetrachloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,2,2-Tetrachloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Tetrachloroethene (PCE)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
trans-1,2-DCE	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
trans-1,3-Dichloropropene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2,3-Trichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,2,4-Trichlorobenzene	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,1-Trichloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
1,1,2-Trichloroethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Trichloroethene (TCE)	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Trichlorofluoromethane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-14 (1.5-2') DUP

Project: SWMU NO.1

Collection Date: 10/15/2012 3:55:00 PM

Lab ID: 1210811-011

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Vinyl chloride	ND	0.000854		mg/Kg	1	10/17/2012 8:34:21 PM
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%REC	1	10/17/2012 8:34:21 PM
Surr: 4-Bromofluorobenzene	88.9	70-130		%REC	1	10/17/2012 8:34:21 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/17/2012 8:34:21 PM
Surr: Toluene-d8	80.8	70-130		%REC	1	10/17/2012 8:34:21 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:20:00 PM

Lab ID: 1210811-012

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 11:23:15 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 11:23:15 AM
Surr: DNOP	97.5	77.6-140		%REC	1	10/18/2012 11:23:15 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 4:24:48 PM
Surr: BFB	87.7	84-116		%REC	1	10/24/2012 4:24:48 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:07:10 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	13		mg/Kg	5	11/2/2012 4:56:27 PM
Arsenic	ND	13		mg/Kg	5	11/2/2012 4:56:27 PM
Barium	360	2.0		mg/Kg	20	11/2/2012 4:58:52 PM
Beryllium	0.75	0.75		mg/Kg	5	11/2/2012 4:56:27 PM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 4:56:27 PM
Chromium	10	1.5		mg/Kg	5	11/2/2012 4:56:27 PM
Cobalt	4.4	1.5		mg/Kg	5	11/2/2012 4:56:27 PM
Iron	13000	500		mg/Kg	500	11/2/2012 5:01:17 PM
Lead	3.1	1.3		mg/Kg	5	11/2/2012 4:56:27 PM
Manganese	350	2.0		mg/Kg	20	11/2/2012 4:58:52 PM
Nickel	7.6	2.5		mg/Kg	5	11/2/2012 4:56:27 PM
Selenium	ND	13		mg/Kg	5	11/2/2012 4:56:27 PM
Silver	ND	1.3		mg/Kg	5	11/2/2012 4:56:27 PM
Vanadium	19	13		mg/Kg	5	11/2/2012 4:56:27 PM
Zinc	18	13		mg/Kg	5	11/2/2012 4:56:27 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM

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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:20:00 PM

Lab ID: 1210811-012

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 5:54:58 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 5:54:58 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 5:54:58 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 5:54:58 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:20:00 PM

Lab ID: 1210811-012

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 5:54:58 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 5:54:58 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 5:54:58 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 5:54:58 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 5:54:58 AM
Surr: 2,4,6-Tribromophenol	82.7	21.3-145		%REC	1	10/22/2012 5:54:58 AM
Surr: 2-Fluorobiphenyl	93.6	20-131		%REC	1	10/22/2012 5:54:58 AM
Surr: 2-Fluorophenol	74.2	11.9-130		%REC	1	10/22/2012 5:54:58 AM
Surr: 4-Terphenyl-d14	81.0	25.1-149		%REC	1	10/22/2012 5:54:58 AM
Surr: Nitrobenzene-d5	96.8	25.6-137		%REC	1	10/22/2012 5:54:58 AM
Surr: Phenol-d5	79.4	20.3-132		%REC	1	10/22/2012 5:54:58 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00192	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Toluene	0.00151	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Ethylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Xylenes, Total	0.00254	0.00146		mg/Kg	1	10/17/2012 9:05:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2,4-Trimethylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,3,5-Trimethylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dichloroethane (EDC)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dibromoethane (EDB)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Naphthalene	ND	0.00146		mg/Kg	1	10/17/2012 9:05:05 PM
1-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 9:05:05 PM
2-Methylnaphthalene	ND	0.00292		mg/Kg	1	10/17/2012 9:05:05 PM
Acetone	0.0754	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromodichloromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromoform	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Bromomethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2-Butanone	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
Carbon tetrachloride	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Chlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Chloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:20:00 PM

Lab ID: 1210811-012

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Chloromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2-Chlorotoluene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Carbon disulfide	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
4-Chlorotoluene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
cis-1,2-DCE	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
cis-1,3-Dichloropropene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dibromo-3-chloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Dibromochloromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Dibromomethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,3-Dichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,4-Dichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Dichlorodifluoromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1-Dichloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1-Dichloroethene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2-Dichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,3-Dichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2,2-Dichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1-Dichloropropene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Hexachlorobutadiene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Isopropylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
4-Isopropyltoluene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Methylene chloride	ND	0.00219		mg/Kg	1	10/17/2012 9:05:05 PM
n-Butylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
2-Hexanone	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
n-Propylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
sec-Butylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Styrene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
4-Methyl-2-pentanone	ND	0.00730		mg/Kg	1	10/17/2012 9:05:05 PM
tert-Butylbenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,1,2-Tetrachloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,2,2-Tetrachloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Tetrachloroethene (PCE)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
trans-1,2-DCE	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
trans-1,3-Dichloropropene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2,3-Trichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,2,4-Trichlorobenzene	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,1-Trichloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
1,1,2-Trichloroethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Trichloroethene (TCE)	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Trichlorofluoromethane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM

Qualifiers:

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- P Sample pH greater than 2
- RL Reporting Detection Limit

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

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:20:00 PM

Lab ID: 1210811-012

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Vinyl chloride	ND	0.000730		mg/Kg	1	10/17/2012 9:05:05 PM
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	10/17/2012 9:05:05 PM
Surr: 4-Bromofluorobenzene	90.2	70-130		%REC	1	10/17/2012 9:05:05 PM
Surr: Dibromofluoromethane	112	70-130		%REC	1	10/17/2012 9:05:05 PM
Surr: Toluene-d8	86.6	70-130		%REC	1	10/17/2012 9:05:05 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:30:00 PM

Lab ID: 1210811-013

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 12:32:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/18/2012 12:32:30 PM
Surr: DNOP	94.3	77.6-140		%REC	1	10/18/2012 12:32:30 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 4:53:34 PM
Surr: BFB	87.1	84-116		%REC	1	10/24/2012 4:53:34 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:08:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Barium	240	1.0		mg/Kg	10	11/2/2012 5:04:08 PM
Beryllium	0.79	0.30		mg/Kg	2	11/2/2012 11:19:59 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:19:59 AM
Chromium	11	0.60		mg/Kg	2	11/2/2012 11:19:59 AM
Cobalt	5.3	0.60		mg/Kg	2	11/2/2012 11:19:59 AM
Iron	12000	500		mg/Kg	500	11/6/2012 11:53:57 AM
Lead	1.4	0.50		mg/Kg	2	11/2/2012 11:19:59 AM
Manganese	400	1.0		mg/Kg	10	11/2/2012 5:04:08 PM
Nickel	8.3	1.0		mg/Kg	2	11/2/2012 11:19:59 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:19:59 AM
Vanadium	22	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
Zinc	21	5.0		mg/Kg	2	11/2/2012 11:19:59 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Aniline	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Anthracene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Azobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM

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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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:30:00 PM

Lab ID: 1210811-013

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 6:23:55 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Carbazole	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/22/2012 6:23:55 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Chrysene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/22/2012 6:23:55 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/22/2012 6:23:55 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Fluorene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Isophorone	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Naphthalene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 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
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:30:00 PM

Lab ID: 1210811-013

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 6:23:55 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/22/2012 6:23:55 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:23:55 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Phenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Pyrene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Pyridine	ND	0.50		mg/Kg	1	10/22/2012 6:23:55 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/22/2012 6:23:55 AM
Surr: 2,4,6-Tribromophenol	97.1	21.3-145		%REC	1	10/22/2012 6:23:55 AM
Surr: 2-Fluorobiphenyl	93.0	20-131		%REC	1	10/22/2012 6:23:55 AM
Surr: 2-Fluorophenol	81.8	11.9-130		%REC	1	10/22/2012 6:23:55 AM
Surr: 4-Terphenyl-d14	80.3	25.1-149		%REC	1	10/22/2012 6:23:55 AM
Surr: Nitrobenzene-d5	97.2	25.6-137		%REC	1	10/22/2012 6:23:55 AM
Surr: Phenol-d5	84.7	20.3-132		%REC	1	10/22/2012 6:23:55 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Toluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Ethylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Xylenes, Total	ND	0.00144		mg/Kg	1	10/17/2012 9:35:46 PM
Methyl tert-butyl ether (MTBE)	0.00147	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2,4-Trimethylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,3,5-Trimethylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dichloroethane (EDC)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dibromoethane (EDB)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Naphthalene	ND	0.00144		mg/Kg	1	10/17/2012 9:35:46 PM
1-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/17/2012 9:35:46 PM
2-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/17/2012 9:35:46 PM
Acetone	0.0328	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromodichloromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromoform	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Bromomethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2-Butanone	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
Carbon tetrachloride	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Chlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Chloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:30:00 PM

Lab ID: 1210811-013

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Chloromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2-Chlorotoluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Carbon disulfide	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
4-Chlorotoluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
cis-1,2-DCE	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
cis-1,3-Dichloropropene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dibromo-3-chloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Dibromochloromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Dibromomethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,3-Dichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,4-Dichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Dichlorodifluoromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1-Dichloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1-Dichloroethene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2-Dichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,3-Dichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2,2-Dichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1-Dichloropropene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Hexachlorobutadiene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Isopropylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
4-Isopropyltoluene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Methylene chloride	ND	0.00216		mg/Kg	1	10/17/2012 9:35:46 PM
n-Butylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
2-Hexanone	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
n-Propylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
sec-Butylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Styrene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
4-Methyl-2-pentanone	ND	0.00721		mg/Kg	1	10/17/2012 9:35:46 PM
tert-Butylbenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,1,2-Tetrachloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,2,2-Tetrachloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Tetrachloroethene (PCE)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
trans-1,2-DCE	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
trans-1,3-Dichloropropene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2,3-Trichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,2,4-Trichlorobenzene	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,1-Trichloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
1,1,2-Trichloroethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Trichloroethene (TCE)	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Trichlorofluoromethane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-15 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:30:00 PM

Lab ID: 1210811-013

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Vinyl chloride	ND	0.000721		mg/Kg	1	10/17/2012 9:35:46 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%REC	1	10/17/2012 9:35:46 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	10/17/2012 9:35:46 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/17/2012 9:35:46 PM
Surr: Toluene-d8	94.9	70-130		%REC	1	10/17/2012 9:35:46 PM

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RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:55:00 PM

Lab ID: 1210811-014

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 2:11:51 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 2:11:51 PM
Surr: DNOP	94.8	77.6-140		%REC	1	10/18/2012 2:11:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 5:22:13 PM
Surr: BFB	87.6	84-116		%REC	1	10/24/2012 5:22:13 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:10:44 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Arsenic	ND	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Barium	640	2.0		mg/Kg	20	11/2/2012 5:19:54 PM
Beryllium	0.46	0.30		mg/Kg	2	11/2/2012 11:22:28 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:22:28 AM
Chromium	3.9	0.60		mg/Kg	2	11/2/2012 11:22:28 AM
Cobalt	3.0	0.60		mg/Kg	2	11/2/2012 11:22:28 AM
Iron	3400	500		mg/Kg	500	11/6/2012 11:56:51 AM
Lead	ND	0.50		mg/Kg	2	11/2/2012 11:22:28 AM
Manganese	330	2.0		mg/Kg	20	11/2/2012 5:19:54 PM
Nickel	4.6	1.0		mg/Kg	2	11/2/2012 11:22:28 AM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:22:28 AM
Vanadium	14	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
Zinc	14	5.0		mg/Kg	2	11/2/2012 11:22:28 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:55:00 PM

Lab ID: 1210811-014

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 6:52:45 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 6:52:45 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 6:52:45 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 6:52:45 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:55:00 PM

Lab ID: 1210811-014

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 6:52:45 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 6:52:45 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 6:52:45 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 6:52:45 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 6:52:45 AM
Surr: 2,4,6-Tribromophenol	66.1	21.3-145		%REC	1	10/22/2012 6:52:45 AM
Surr: 2-Fluorobiphenyl	74.1	20-131		%REC	1	10/22/2012 6:52:45 AM
Surr: 2-Fluorophenol	58.3	11.9-130		%REC	1	10/22/2012 6:52:45 AM
Surr: 4-Terphenyl-d14	69.2	25.1-149		%REC	1	10/22/2012 6:52:45 AM
Surr: Nitrobenzene-d5	74.4	25.6-137		%REC	1	10/22/2012 6:52:45 AM
Surr: Phenol-d5	65.1	20.3-132		%REC	1	10/22/2012 6:52:45 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00134	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Toluene	0.00712	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Ethylbenzene	0.00282	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Xylenes, Total	0.0130	0.00157		mg/Kg	1	10/17/2012 10:06:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2,4-Trimethylbenzene	0.00423	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,3,5-Trimethylbenzene	0.00176	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dichloroethane (EDC)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dibromoethane (EDB)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Naphthalene	ND	0.00157		mg/Kg	1	10/17/2012 10:06:30 PM
1-Methylnaphthalene	ND	0.00314		mg/Kg	1	10/17/2012 10:06:30 PM
2-Methylnaphthalene	ND	0.00314		mg/Kg	1	10/17/2012 10:06:30 PM
Acetone	0.0845	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromodichloromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromoform	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Bromomethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2-Butanone	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
Carbon tetrachloride	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Chlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Chloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:55:00 PM

Lab ID: 1210811-014

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Chloromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2-Chlorotoluene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Carbon disulfide	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
4-Chlorotoluene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
cis-1,2-DCE	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
cis-1,3-Dichloropropene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dibromo-3-chloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Dibromochloromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Dibromomethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,3-Dichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,4-Dichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Dichlorodifluoromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1-Dichloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1-Dichloroethene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2-Dichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,3-Dichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2,2-Dichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1-Dichloropropene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Hexachlorobutadiene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Isopropylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
4-Isopropyltoluene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Methylene chloride	ND	0.00236		mg/Kg	1	10/17/2012 10:06:30 PM
n-Butylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
2-Hexanone	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
n-Propylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
sec-Butylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Styrene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
4-Methyl-2-pentanone	ND	0.00785		mg/Kg	1	10/17/2012 10:06:30 PM
tert-Butylbenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,1,2-Tetrachloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,2,2-Tetrachloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Tetrachloroethene (PCE)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
trans-1,2-DCE	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
trans-1,3-Dichloropropene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2,3-Trichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,2,4-Trichlorobenzene	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,1-Trichloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
1,1,2-Trichloroethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Trichloroethene (TCE)	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Trichlorofluoromethane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 4:55:00 PM

Lab ID: 1210811-014

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Vinyl chloride	ND	0.000785		mg/Kg	1	10/17/2012 10:06:30 PM
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	10/17/2012 10:06:30 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	1	10/17/2012 10:06:30 PM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/17/2012 10:06:30 PM
Surr: Toluene-d8	91.8	70-130		%REC	1	10/17/2012 10:06:30 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:05:00 PM

Lab ID: 1210811-015

Matrix: SOIL

Received Date: 10/17/2012 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	10/19/2012 8:41:24 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2012 8:41:24 AM
Surr: DNOP	101	77.6-140		%REC	1	10/19/2012 8:41:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 5:50:52 PM
Surr: BFB	89.9	84-116		%REC	1	10/24/2012 5:50:52 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.033	0.033		mg/kg	1	10/23/2012 6:23:10 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	11/6/2012 11:59:37 AM
Arsenic	ND	12		mg/Kg	5	11/6/2012 11:59:37 AM
Barium	290	2.0		mg/Kg	20	11/2/2012 5:27:35 PM
Beryllium	ND	0.75		mg/Kg	5	11/2/2012 5:25:09 PM
Cadmium	ND	0.50		mg/Kg	5	11/2/2012 5:25:09 PM
Chromium	9.9	1.5		mg/Kg	5	11/2/2012 5:25:09 PM
Cobalt	4.2	1.5		mg/Kg	5	11/2/2012 5:25:09 PM
Iron	12000	500		mg/Kg	500	11/6/2012 12:02:39 PM
Lead	4.2	1.2		mg/Kg	5	11/2/2012 5:25:09 PM
Manganese	790	2.0		mg/Kg	20	11/2/2012 5:27:35 PM
Nickel	7.2	2.5		mg/Kg	5	11/2/2012 5:25:09 PM
Selenium	ND	12		mg/Kg	5	11/2/2012 5:25:09 PM
Silver	ND	1.2		mg/Kg	5	11/2/2012 5:25:09 PM
Vanadium	18	12		mg/Kg	5	11/2/2012 5:25:09 PM
Zinc	17	12		mg/Kg	5	11/6/2012 11:59:37 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM

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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:05:00 PM

Lab ID: 1210811-015

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 7:21:36 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 7:21:36 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 7:21:36 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 7:21:36 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:05:00 PM

Lab ID: 1210811-015

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 7:21:36 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 7:21:36 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:21:36 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 7:21:36 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:21:36 AM
Surr: 2,4,6-Tribromophenol	84.9	21.3-145		%REC	1	10/22/2012 7:21:36 AM
Surr: 2-Fluorobiphenyl	93.5	20-131		%REC	1	10/22/2012 7:21:36 AM
Surr: 2-Fluorophenol	89.6	11.9-130		%REC	1	10/22/2012 7:21:36 AM
Surr: 4-Terphenyl-d14	85.1	25.1-149		%REC	1	10/22/2012 7:21:36 AM
Surr: Nitrobenzene-d5	101	25.6-137		%REC	1	10/22/2012 7:21:36 AM
Surr: Phenol-d5	89.6	20.3-132		%REC	1	10/22/2012 7:21:36 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00166	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Toluene	0.00157	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Ethylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Xylenes, Total	ND	0.00149		mg/Kg	1	10/17/2012 10:37:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2,4-Trimethylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,3,5-Trimethylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dichloroethane (EDC)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dibromoethane (EDB)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Naphthalene	ND	0.00149		mg/Kg	1	10/17/2012 10:37:20 PM
1-Methylnaphthalene	ND	0.00297		mg/Kg	1	10/17/2012 10:37:20 PM
2-Methylnaphthalene	ND	0.00297		mg/Kg	1	10/17/2012 10:37:20 PM
Acetone	0.0282	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromodichloromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromoform	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Bromomethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2-Butanone	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
Carbon tetrachloride	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Chlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Chloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:05:00 PM

Lab ID: 1210811-015

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Chloromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2-Chlorotoluene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Carbon disulfide	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
4-Chlorotoluene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
cis-1,2-DCE	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
cis-1,3-Dichloropropene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dibromo-3-chloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Dibromochloromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Dibromomethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,3-Dichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,4-Dichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Dichlorodifluoromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1-Dichloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1-Dichloroethene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2-Dichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,3-Dichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2,2-Dichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1-Dichloropropene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Hexachlorobutadiene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Isopropylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
4-Isopropyltoluene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Methylene chloride	ND	0.00223		mg/Kg	1	10/17/2012 10:37:20 PM
n-Butylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
2-Hexanone	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
n-Propylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
sec-Butylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Styrene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
4-Methyl-2-pentanone	ND	0.00743		mg/Kg	1	10/17/2012 10:37:20 PM
tert-Butylbenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,1,2-Tetrachloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,2,2-Tetrachloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Tetrachloroethene (PCE)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
trans-1,2-DCE	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
trans-1,3-Dichloropropene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2,3-Trichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,2,4-Trichlorobenzene	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,1-Trichloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
1,1,2-Trichloroethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Trichloroethene (TCE)	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Trichlorofluoromethane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-16 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:05:00 PM

Lab ID: 1210811-015

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Vinyl chloride	ND	0.000743		mg/Kg	1	10/17/2012 10:37:20 PM
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%REC	1	10/17/2012 10:37:20 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	10/17/2012 10:37:20 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/17/2012 10:37:20 PM
Surr: Toluene-d8	97.5	70-130		%REC	1	10/17/2012 10:37:20 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:30:00 PM

Lab ID: 1210811-016

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 2:37:02 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/18/2012 2:37:02 PM
Surr: DNOP	93.7	77.6-140		%REC	1	10/18/2012 2:37:02 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 6:19:44 PM
Surr: BFB	90.2	84-116		%REC	1	10/24/2012 6:19:44 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:24:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	5.0		mg/Kg	2	11/27/2012 10:08:12 AM
Arsenic	ND	5.0		mg/Kg	2	11/27/2012 10:08:12 AM
Barium	500	2.0		mg/Kg	20	11/2/2012 5:40:07 PM
Beryllium	0.67	0.30		mg/Kg	2	11/2/2012 11:37:29 AM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 11:37:29 AM
Chromium	6.6	0.60		mg/Kg	2	11/2/2012 11:37:29 AM
Cobalt	4.1	0.60		mg/Kg	2	11/2/2012 11:37:29 AM
Iron	8200	500		mg/Kg	500	11/6/2012 2:17:39 PM
Lead	0.82	0.50		mg/Kg	2	11/2/2012 11:37:29 AM
Manganese	360	2.0		mg/Kg	20	11/2/2012 5:40:07 PM
Nickel	6.4	1.0		mg/Kg	2	11/2/2012 11:37:29 AM
Selenium	ND	5.0		mg/Kg	2	11/27/2012 10:08:12 AM
Silver	ND	0.50		mg/Kg	2	11/2/2012 11:37:29 AM
Vanadium	19	5.0		mg/Kg	2	11/2/2012 11:37:29 AM
Zinc	15	5.0		mg/Kg	2	11/2/2012 11:37:29 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Benzoic acid	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:30:00 PM

Lab ID: 1210811-016

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 7:50:26 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 7:50:26 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 7:50:26 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 7:50:26 AM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Isophorone	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2-Methylphenol	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:30:00 PM

Lab ID: 1210811-016

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 7:50:26 AM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
Nitrobenzene	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 7:50:26 AM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/22/2012 7:50:26 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Pyridine	ND	1.0		mg/Kg	1	10/22/2012 7:50:26 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 7:50:26 AM
Surr: 2,4,6-Tribromophenol	91.6	21.3-145		%REC	1	10/22/2012 7:50:26 AM
Surr: 2-Fluorobiphenyl	96.7	20-131		%REC	1	10/22/2012 7:50:26 AM
Surr: 2-Fluorophenol	87.5	11.9-130		%REC	1	10/22/2012 7:50:26 AM
Surr: 4-Terphenyl-d14	87.9	25.1-149		%REC	1	10/22/2012 7:50:26 AM
Surr: Nitrobenzene-d5	98.8	25.6-137		%REC	1	10/22/2012 7:50:26 AM
Surr: Phenol-d5	88.9	20.3-132		%REC	1	10/22/2012 7:50:26 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00129	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Toluene	0.00708	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Ethylbenzene	0.00362	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Xylenes, Total	0.0234	0.00150		mg/Kg	1	10/17/2012 11:08:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2,4-Trimethylbenzene	0.00424	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,3,5-Trimethylbenzene	0.00164	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dichloroethane (EDC)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dibromoethane (EDB)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Naphthalene	ND	0.00150		mg/Kg	1	10/17/2012 11:08:05 PM
1-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/17/2012 11:08:05 PM
2-Methylnaphthalene	ND	0.00301		mg/Kg	1	10/17/2012 11:08:05 PM
Acetone	0.377	0.00752	E	mg/Kg	1	10/17/2012 11:08:05 PM
Bromobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Bromodichloromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Bromoform	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Bromomethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2-Butanone	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
Carbon tetrachloride	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Chlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Chloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:30:00 PM

Lab ID: 1210811-016

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Chloromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2-Chlorotoluene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Carbon disulfide	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
4-Chlorotoluene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
cis-1,2-DCE	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
cis-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dibromo-3-chloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Dibromochloromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Dibromomethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,3-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,4-Dichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Dichlorodifluoromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1-Dichloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1-Dichloroethene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,3-Dichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2,2-Dichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1-Dichloropropene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Hexachlorobutadiene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Isopropylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
4-Isopropyltoluene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Methylene chloride	ND	0.00226		mg/Kg	1	10/17/2012 11:08:05 PM
n-Butylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
2-Hexanone	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
n-Propylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
sec-Butylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Styrene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
4-Methyl-2-pentanone	ND	0.00752		mg/Kg	1	10/17/2012 11:08:05 PM
tert-Butylbenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,1,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,2,2-Tetrachloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Tetrachloroethene (PCE)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
trans-1,2-DCE	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
trans-1,3-Dichloropropene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2,3-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,2,4-Trichlorobenzene	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,1-Trichloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
1,1,2-Trichloroethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Trichloroethene (TCE)	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Trichlorofluoromethane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:30:00 PM

Lab ID: 1210811-016

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Vinyl chloride	ND	0.000752		mg/Kg	1	10/17/2012 11:08:05 PM
Surr: 1,2-Dichloroethane-d4	88.7	70-130		%REC	1	10/17/2012 11:08:05 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	1	10/17/2012 11:08:05 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/17/2012 11:08:05 PM
Surr: Toluene-d8	91.5	70-130		%REC	1	10/17/2012 11:08:05 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:40:00 PM

Lab ID: 1210811-017

Matrix: SOIL

Received Date: 10/17/2012 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	10/18/2012 3:02:26 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/18/2012 3:02:26 PM
Surr: DNOP	96.0	77.6-140		%REC	1	10/18/2012 3:02:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 6:48:35 PM
Surr: BFB	88.8	84-116		%REC	1	10/24/2012 6:48:35 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:26:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	11/6/2012 12:24:33 PM
Arsenic	ND	5.0		mg/Kg	2	11/6/2012 2:00:22 PM
Barium	310	2.0		mg/Kg	20	11/2/2012 6:05:26 PM
Beryllium	0.78	0.30		mg/Kg	2	11/2/2012 6:02:58 PM
Cadmium	ND	0.20		mg/Kg	2	11/2/2012 6:02:58 PM
Chromium	8.8	0.60		mg/Kg	2	11/2/2012 6:02:58 PM
Cobalt	4.1	0.60		mg/Kg	2	11/2/2012 6:02:58 PM
Iron	11000	500		mg/Kg	500	11/6/2012 2:20:27 PM
Lead	3.5	0.50		mg/Kg	2	11/2/2012 6:02:58 PM
Manganese	340	2.0		mg/Kg	20	11/2/2012 6:05:26 PM
Nickel	7.2	1.0		mg/Kg	2	11/2/2012 6:02:58 PM
Selenium	ND	5.0		mg/Kg	2	11/2/2012 6:02:58 PM
Silver	ND	0.50		mg/Kg	2	11/13/2012 5:30:19 AM
Vanadium	13	5.0		mg/Kg	2	11/2/2012 6:02:58 PM
Zinc	15	5.0		mg/Kg	2	11/6/2012 12:24:33 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Acenaphthylene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Aniline	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Anthracene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Azobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Benzoic acid	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:40:00 PM

Lab ID: 1210811-017

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Carbazole	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/22/2012 8:19:31 AM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Chrysene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
Di-n-octyl phthalate	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Dibenzofuran	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/22/2012 8:19:31 AM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/22/2012 8:19:31 AM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
Fluoranthene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Fluorene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Hexachloroethane	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Isophorone	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2-Methylphenol	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Naphthalene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM

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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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:40:00 PM

Lab ID: 1210811-017

Matrix: SOIL

Received Date: 10/17/2012 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	10/22/2012 8:19:31 AM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
Nitrobenzene	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/22/2012 8:19:31 AM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/22/2012 8:19:31 AM
Phenanthrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Phenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Pyrene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Pyridine	ND	0.99		mg/Kg	1	10/22/2012 8:19:31 AM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/22/2012 8:19:31 AM
Surr: 2,4,6-Tribromophenol	84.8	21.3-145		%REC	1	10/22/2012 8:19:31 AM
Surr: 2-Fluorobiphenyl	83.4	20-131		%REC	1	10/22/2012 8:19:31 AM
Surr: 2-Fluorophenol	82.3	11.9-130		%REC	1	10/22/2012 8:19:31 AM
Surr: 4-Terphenyl-d14	85.4	25.1-149		%REC	1	10/22/2012 8:19:31 AM
Surr: Nitrobenzene-d5	93.3	25.6-137		%REC	1	10/22/2012 8:19:31 AM
Surr: Phenol-d5	80.4	20.3-132		%REC	1	10/22/2012 8:19:31 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00269	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Toluene	0.00185	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Ethylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Xylenes, Total	ND	0.00167		mg/Kg	1	10/17/2012 11:38:49 PM
Methyl tert-butyl ether (MTBE)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2,4-Trimethylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,3,5-Trimethylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dichloroethane (EDC)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dibromoethane (EDB)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Naphthalene	ND	0.00167		mg/Kg	1	10/17/2012 11:38:49 PM
1-Methylnaphthalene	ND	0.00334		mg/Kg	1	10/17/2012 11:38:49 PM
2-Methylnaphthalene	ND	0.00334		mg/Kg	1	10/17/2012 11:38:49 PM
Acetone	0.0615	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromodichloromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromoform	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Bromomethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2-Butanone	0.0107	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
Carbon tetrachloride	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Chlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Chloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:40:00 PM

Lab ID: 1210811-017

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Chloromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2-Chlorotoluene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Carbon disulfide	ND	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
4-Chlorotoluene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
cis-1,2-DCE	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
cis-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dibromo-3-chloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Dibromochloromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Dibromomethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,3-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,4-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Dichlorodifluoromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1-Dichloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1-Dichloroethene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,3-Dichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1-Dichloropropene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Hexachlorobutadiene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Isopropylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
4-Isopropyltoluene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Methylene chloride	ND	0.00250		mg/Kg	1	10/17/2012 11:38:49 PM
n-Butylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
2-Hexanone	ND	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
n-Propylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
sec-Butylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Styrene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
4-Methyl-2-pentanone	ND	0.00834		mg/Kg	1	10/17/2012 11:38:49 PM
tert-Butylbenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,1,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,2,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Tetrachloroethene (PCE)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
trans-1,2-DCE	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
trans-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2,3-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,2,4-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,1-Trichloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
1,1,2-Trichloroethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Trichloroethene (TCE)	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Trichlorofluoromethane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-17 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/15/2012 5:40:00 PM

Lab ID: 1210811-017

Matrix: SOIL

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Vinyl chloride	ND	0.000834		mg/Kg	1	10/17/2012 11:38:49 PM
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%REC	1	10/17/2012 11:38:49 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/17/2012 11:38:49 PM
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/17/2012 11:38:49 PM
Surr: Toluene-d8	82.3	70-130		%REC	1	10/17/2012 11:38:49 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101512

Project: SWMU NO.1

Collection Date: 10/15/2012 6:00:00 PM

Lab ID: 1210811-018

Matrix: AQUEOUS

Received Date: 10/17/2012 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	10/17/2012 5:29:17 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/17/2012 5:29:17 PM
Surr: DNOP	110	79.5-166		%REC	1	10/17/2012 5:29:17 PM
EPA METHOD 300.0: ANIONS						Analyst: SRM
Fluoride	ND	0.10		mg/L	1	10/17/2012 11:42:11 AM
Chloride	ND	0.50		mg/L	1	10/17/2012 11:42:11 AM
Sulfate	ND	0.50		mg/L	1	10/17/2012 11:42:11 AM
EPA METHOD 200.7: METALS						Analyst: JLF
Barium	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Beryllium	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Chromium	ND	0.0060		mg/L	1	10/17/2012 9:49:33 PM
Cobalt	0.16	0.0060		mg/L	1	10/17/2012 9:49:33 PM
Iron	0.16	0.020		mg/L	1	10/18/2012 1:47:35 PM
Manganese	ND	0.0020		mg/L	1	10/17/2012 9:49:33 PM
Nickel	ND	0.010		mg/L	1	10/17/2012 9:49:33 PM
Silver	ND	0.0050		mg/L	1	10/17/2012 9:49:33 PM
Vanadium	ND	0.050		mg/L	1	10/17/2012 9:49:33 PM
Zinc	ND	0.010		mg/L	1	10/17/2012 9:49:33 PM
EPA 200.8: METALS						Analyst: DBD
Antimony	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
Arsenic	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
Lead	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
Selenium	ND	0.0010		mg/L	1	10/30/2012 4:04:21 PM
EPA METHOD 245.1: MERCURY						Analyst: IDC
Mercury	ND	0.00020		mg/L	1	10/30/2012 6:51:42 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Acenaphthylene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Aniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Anthracene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Azobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benz(a)anthracene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(a)pyrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Benzoic acid	ND	20		µg/L	1	10/22/2012 7:47:47 PM
Benzyl alcohol	ND	10		µg/L	1	10/22/2012 7:47:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101512

Project: SWMU NO.1

Collection Date: 10/15/2012 6:00:00 PM

Lab ID: 1210811-018

Matrix: AQUEOUS

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Butyl benzyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Carbazole	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Chloroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Chloronaphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Chlorophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Chrysene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Di-n-butyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Di-n-octyl phthalate	ND	20		µg/L	1	10/22/2012 7:47:47 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Dibenzofuran	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Diethyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Dimethyl phthalate	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dichlorophenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dimethylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dinitrophenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Fluoranthene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Fluorene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachlorobutadiene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Hexachloroethane	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Isophorone	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Methylnaphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Methylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
3+4-Methylphenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/22/2012 7:47:47 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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101512

Project: SWMU NO.1

Collection Date: 10/15/2012 6:00:00 PM

Lab ID: 1210811-018

Matrix: AQUEOUS

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
N-Nitrosodimethylamine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Naphthalene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Nitroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
3-Nitroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Nitroaniline	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Nitrobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2-Nitrophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
4-Nitrophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Pentachlorophenol	ND	20		µg/L	1	10/22/2012 7:47:47 PM
Phenanthrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Phenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Pyrene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Pyridine	ND	10		µg/L	1	10/22/2012 7:47:47 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	10/22/2012 7:47:47 PM
Surr: 2,4,6-Tribromophenol	79.8	42.9-124		%REC	1	10/22/2012 7:47:47 PM
Surr: 2-Fluorobiphenyl	73.5	40-108		%REC	1	10/22/2012 7:47:47 PM
Surr: 2-Fluorophenol	54.3	23.6-94.8		%REC	1	10/22/2012 7:47:47 PM
Surr: 4-Terphenyl-d14	70.5	41.9-103		%REC	1	10/22/2012 7:47:47 PM
Surr: Nitrobenzene-d5	79.5	42.6-114		%REC	1	10/22/2012 7:47:47 PM
Surr: Phenol-d5	39.4	20.3-74.7		%REC	1	10/22/2012 7:47:47 PM
EPA METHOD 8260B: VOLATILES						Analyst: MMS
Benzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Toluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Ethylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Naphthalene	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/20/2012 5:00:19 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/20/2012 5:00:19 AM
Acetone	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Bromobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Bromoform	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Bromomethane	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
2-Butanone	ND	10		µg/L	1	10/20/2012 5:00:19 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
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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 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101512

Project: SWMU NO.1

Collection Date: 10/15/2012 6:00:00 PM

Lab ID: 1210811-018

Matrix: AQUEOUS

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: MMS
Carbon disulfide	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Chlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Chloroethane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Chloroform	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Chloromethane	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Dibromomethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
2-Hexanone	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/20/2012 5:00:19 AM
Methylene Chloride	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
n-Butylbenzene	ND	3.0		µg/L	1	10/20/2012 5:00:19 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Styrene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210811

Date Reported: 11/28/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: EB101512

Project: SWMU NO.1

Collection Date: 10/15/2012 6:00:00 PM

Lab ID: 1210811-018

Matrix: AQUEOUS

Received Date: 10/17/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: MMS
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/20/2012 5:00:19 AM
Vinyl chloride	ND	1.0		µg/L	1	10/20/2012 5:00:19 AM
Xylenes, Total	ND	1.5		µg/L	1	10/20/2012 5:00:19 AM
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%REC	1	10/20/2012 5:00:19 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/20/2012 5:00:19 AM
Surr: Dibromofluoromethane	104	70-130		%REC	1	10/20/2012 5:00:19 AM
Surr: Toluene-d8	97.7	70-130		%REC	1	10/20/2012 5:00:19 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	10/20/2012 11:46:01 PM
Surr: BFB	91.0	70-130		%REC	1	10/20/2012 11:46:01 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

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 #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number	121018035-001	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM		
Client Sample ID	1210811-001D / SWMU 1-9 (0-0.5)	Sampling Time	10:55 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.41	mg/Kg	0.26	10/29/2012	CRW	EPA 335.4	
%moisture	7.9	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-002	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM		
Client Sample ID	1210811-002D / SWMU 1-9 (1.5-2)	Sampling Time	11:05 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.285	10/29/2012	CRW	EPA 335.4	
%moisture	14.4	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-003	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM		
Client Sample ID	1210811-003D / SWMU 1-10 (0-0.5)	Sampling Time	11:20 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.84	mg/Kg	0.241	10/29/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-004	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM		
Client Sample ID	1210811-004D / SWMU 1-10 (1.5-2)	Sampling Time	11:30 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.399	mg/Kg	0.256	10/29/2012	CRW	EPA 335.4	
%moisture	4.2	Percent		10/30/2012	CRW	%moisture	

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

Anatek Labs, Inc.

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

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

Batch #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number 121018035-005 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-005D / SWMU 1-11 (0-0.5) **Sampling Time** 12:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.716	mg/Kg	0.261	10/29/2012	CRW	EPA 335.4	
%moisture	5.1	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-006 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-006D / SWMU 1-11 (1.5-2) **Sampling Time** 12:20 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.68	mg/Kg	0.267	10/29/2012	CRW	EPA 335.4	
%moisture	5.5	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-007 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-007D / SWMU 1-12 (0-0.5) **Sampling Time** 2:45 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.25	10/29/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-008 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-008D / SWMU 1-12 (0.5-1) **Sampling Time** 3:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	1.15	mg/Kg	0.245	10/29/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	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 #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number	121018035-009	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM
Client Sample ID	1210811-009D / SWMU 1-14 (0-0.5)	Sampling Time	3:30 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.268	10/29/2012	CRW	EPA 335.4	
%moisture	7.5	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-010	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM
Client Sample ID	1210811-010D / SWMU 1-14 (1.5-2)	Sampling Time	3:55 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.287	10/29/2012	CRW	EPA 335.4	
%moisture	12.7	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-011	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM
Client Sample ID	1210811-011D / SWMU 1-14 (1.5-2)	Sampling Time	3:55 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.284	10/29/2012	CRW	EPA 335.4	
%moisture	12.3	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-012	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM
Client Sample ID	1210811-012D / SWMU 1-15 (0-0.5)	Sampling Time	4:20 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.276	10/29/2012	CRW	EPA 335.4	
%moisture	9.4	Percent		10/30/2012	CRW	%moisture	

Anatek Labs, Inc.

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

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

Batch #: 121018035
Project Name: 1210811

Analytical Results Report

Sample Number 121018035-013 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-013D / SWMU 1-15 (1.5-2) **Sampling Time** 4:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.281	10/29/2012	CRW	EPA 335.4	
%moisture	12.1	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-014 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-014D / SWMU 1-16 (0-0.5) **Sampling Time** 4:55 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.254	10/29/2012	CRW	EPA 335.4	
%moisture	2.3	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-015 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-015D / SWMU 1-16 (1.5-2) **Sampling Time** 5:05 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.285	10/29/2012	CRW	EPA 335.4	
%moisture	12.7	Percent		10/30/2012	CRW	%moisture	

Sample Number 121018035-016 **Sampling Date** 10/15/2012 **Date/Time Received** 10/18/2012 12:20 PM
Client Sample ID 1210811-016D / SWMU 1-17 (0-0.5) **Sampling Time** 5:30 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.244	10/29/2012	CRW	EPA 335.4	
%moisture	3.4	Percent		10/30/2012	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 #: 121018035
Project Name: 1210811

Analytical Results Report

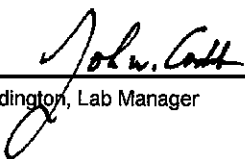
Sample Number	121018035-017	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM
Client Sample ID	1210811-017D / SWMU 1-17 (1-1.5)	Sampling Time	5:40 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.273	10/29/2012	CRW	EPA 335.4	
%moisture	11.9	Percent		10/30/2012	CRW	%moisture	

Sample Number	121018035-018	Sampling Date	10/15/2012	Date/Time Received	10/18/2012 12:20 PM
Client Sample ID	1210811-018F / EB101512	Sampling Time	6:00 PM		
Matrix	Water				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	10/29/2012	CRW	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-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#: 1210811

29-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	

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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1209858-006AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R6580		RunNo: 6580					
Prep Date:			Analysis Date: 10/30/2012		SeqNo: 189993		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0009490	105	70	130			

Sample ID	1209A21-003AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R6580		RunNo: 6580					
Prep Date:			Analysis Date: 10/30/2012		SeqNo: 190002		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0003493	107	70	130			

Sample ID	1210832-001EMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R6580		RunNo: 6580					
Prep Date:			Analysis Date: 10/30/2012		SeqNo: 190029		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	0.025	0.0010	0.02500	0	100	70	130			
Arsenic	0.026	0.0010	0.02500	0	105	70	130			
Selenium	0.026	0.0010	0.02500	0	103	70	130			

Sample ID	1210841-001AMS		SampType: MS		TestCode: EPA 200.8: Metals					
Client ID:	BatchQC		Batch ID: R6580		RunNo: 6580					
Prep Date:			Analysis Date: 10/30/2012		SeqNo: 190033		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.16	0.0050	0.1250	0.03863	96.0	70	130			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R6580		RunNo: 6580					
Prep Date:			Analysis Date: 10/30/2012		SeqNo: 190071		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	103	85	115			
Lead	0.026	0.0010	0.02500	0	105	85	115			
Selenium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Metals					
Client ID:	LCSW		Batch ID: R6580		RunNo: 6580					
Prep Date:			Analysis Date: 10/30/2012		SeqNo: 190073		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.026	0.0010	0.02500	0	106	85	115			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-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: R6580			RunNo: 6580						
Prep Date:		Analysis Date: 10/30/2012			SeqNo: 190075			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: R6580			RunNo: 6580						
Prep Date:		Analysis Date: 10/30/2012			SeqNo: 190077		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead		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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4585		SampType: mblk		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 4585		RunNo: 6596					
Prep Date:	10/30/2012		Analysis Date: 10/30/2012		SeqNo: 190499		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-4585		SampType: lcs		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 4585		RunNo: 6596					
Prep Date:	10/30/2012		Analysis Date: 10/30/2012		SeqNo: 190500		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	98.5	80	120			

Sample ID	1210C89-001AMS		SampType: ms		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4585		RunNo: 6596					
Prep Date:	10/30/2012		Analysis Date: 10/30/2012		SeqNo: 190525		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0098	0.00040	0.01000	0	97.9	75	125			

Sample ID	1210C89-001AMSD		SampType: msd		TestCode: EPA Method 245.1: Mercury					
Client ID:	BatchQC		Batch ID: 4585		RunNo: 6596					
Prep Date:	10/30/2012		Analysis Date: 10/30/2012		SeqNo: 190526		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0096	0.00040	0.01000	0	95.8	75	125	2.25	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#: 1210811

29-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: R6314			RunNo: 6314					
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 181811		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: R6314		RunNo: 6314					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181812		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	92.2	90	110			
Chloride	5.0	0.50	5.000	0	99.4	90	110			
Sulfate	9.9	0.50	10.00	0	99.4	90	110			

Sample ID	1210811-018CMS	SampType: MS			TestCode: EPA Method 300.0: Anions					
Client ID:	EB101512	Batch ID: R6314			RunNo: 6314					
Prep Date:		Analysis Date: 10/17/2012			SeqNo: 181814		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.46	0.10	0.5000	0	91.9	76.6	110			
Chloride	5.0	0.50	5.000	0	99.6	87.8	111			
Sulfate	9.8	0.50	10.00	0	97.6	84.6	122			

Sample ID	1210811-018CMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	EB101512		Batch ID: R6314		RunNo: 6314					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181815		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.45	0.10	0.5000	0	90.8	76.6	110	1.21	20	
Chloride	4.8	0.50	5.000	0	95.9	87.8	111	3.74	20	
Sulfate	9.4	0.50	10.00	0	94.1	84.6	122	3.75	20	

Sample ID	1210825-001BMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	BatchQC		Batch ID: R6314		RunNo: 6314					
Prep Date:			Analysis Date: 10/17/2012		SeqNo: 181818		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6296	88.2	76.6	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210825-001BMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	R6314	RunNo:	6314					
Prep Date:		Analysis Date:	10/17/2012	SeqNo:	181819	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.6296	88.1	76.6	110	0.0510	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4369	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4369			RunNo: 6325					
Prep Date:	10/17/2012	Analysis Date: 10/18/2012			SeqNo: 182210		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	77.6	140			

Sample ID	LCS-4369		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4369		RunNo: 6325					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182211		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.4	52.6	130			
Surr: DNOP	4.4		5.000		87.6	77.6	140			

Sample ID	MB-4366	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4366			RunNo: 6331					
Prep Date:	10/17/2012	Analysis Date: 10/18/2012			SeqNo: 182277		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	77.6	140			

Sample ID	LCS-4366		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4366		RunNo: 6331					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182278		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	10	50.00	0	66.7	52.6	130			
Surr: DNOP	4.3		5.000		86.3	77.6	140			

Sample ID	1210743-001AMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 4366			RunNo: 6331					
Prep Date:	10/17/2012	Analysis Date: 10/18/2012			SeqNo: 182280		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	9.9	49.55	0	62.0	57.2	146			
Surr: DNOP	4.1		4.955		82.1	77.6	140			

Sample ID	1210743-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4366		RunNo: 6331					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182281		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210743-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4366		RunNo: 6331					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182281		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	10	51.39	0	63.3	57.2	146	5.63	24.5	
Surr: DNOP	4.4		5.139		85.7	77.6	140	0	0	

Sample ID	MB-4397		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4397		RunNo: 6325					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182283		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID	LCS-4397		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4397		RunNo: 6325					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182284		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID	1210811-013CMS		SampType: MS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-15 (1.5-2')		Batch ID: 4369		RunNo: 6331					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182453		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	10	50.51	0	68.3	57.2	146			
Surr: DNOP	4.3		5.051		86.0	77.6	140			

Sample ID	1210811-013CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 1-15 (1.5-2')		Batch ID: 4369		RunNo: 6331					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182454		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	31	9.6	48.03	0	63.7	57.2	146	12.0	24.5	
Surr: DNOP	4.0		4.803		84.0	77.6	140	0	0	

Sample ID	MB-4404	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4404			RunNo: 6356					
Prep Date:	10/18/2012	Analysis Date: 10/19/2012			SeqNo: 182984		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	LCS-4404		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182985		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID	1210819-001AMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 4404			RunNo: 6356					
Prep Date:	10/18/2012	Analysis Date: 10/19/2012			SeqNo: 183001		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	1210819-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183002		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4383		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	PBW		Batch ID: 4383		RunNo: 6305					
Prep Date:	10/17/2012		Analysis Date: 10/17/2012		SeqNo: 181999		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		107	79.5	166			

Sample ID	LCS-4383		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSW		Batch ID: 4383		RunNo: 6305					
Prep Date:	10/17/2012		Analysis Date: 10/17/2012		SeqNo: 182000		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	75.9	74	157			
Surr: DNOP	0.48		0.5000		96.6	79.5	166			

Sample ID	LCSD-4383		SampType: LCSD		TestCode: EPA Method 8015B: Diesel Range					
Client ID:	LCSS02		Batch ID: 4383		RunNo: 6305					
Prep Date:	10/17/2012		Analysis Date: 10/17/2012		SeqNo: 182001		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	75.5	74	157	0.595	23	
Surr: DNOP	0.47		0.5000		94.9	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4420		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4420		RunNo: 6401					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012		SeqNo: 184413		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.3	84	116			

Sample ID	LCS-4420		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4420		RunNo: 6401					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012		SeqNo: 184414		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	93.7	74	117			
Surr: BFB	990		1000		99.5	84	116			

Sample ID	1210916-002AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4420		RunNo: 6401					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012		SeqNo: 184418		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	35	4.8	24.06	1.798	137	70	130			S
Surr: BFB	1100		962.5		115	84	116			

Sample ID	1210916-002AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4420		RunNo: 6401					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012		SeqNo: 184419		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	36	4.8	24.02	1.798	144	70	130	4.59	22.1	S
Surr: BFB	1100		960.6		117	84	116	0	0	S

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: R6457		RunNo: 6457					
Prep Date:			Analysis Date: 10/24/2012		SeqNo: 186219		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	920		1000		91.7	84	116			

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: R6457		RunNo: 6457					
Prep Date:			Analysis Date: 10/24/2012		SeqNo: 186225		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.5	74	117			
Surr: BFB	930		1000		93.1	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210811-011BMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	SWMU 1-14 (1.5-2')	Batch ID:	R6457	RunNo:	6457					
Prep Date:		Analysis Date:	10/24/2012	SeqNo:	186249	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	5.0	15.90	0	110	70	130	12.7	22.1	
Surr: BFB	590		636.0		93.2	84	116	0	0	

Sample ID	1210811-011BMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	SWMU 1-14 (1.5-2')	Batch ID:	R6457	RunNo:	6487					
Prep Date:		Analysis Date:	10/25/2012	SeqNo:	187647	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.91	0	96.6	70	130			
Surr: BFB	650		636.4		102	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4361		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4361			RunNo: 6338				
Prep Date:	10/17/2012		Analysis Date: 10/17/2012			SeqNo: 182426		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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4361		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4361		RunNo: 6338					
Prep Date:	10/17/2012		Analysis Date: 10/17/2012		SeqNo: 182426		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	47.9		50.00		95.7	70	130			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.4	70	130			
Surr: Dibromofluoromethane	53.2		50.00		106	70	130			
Surr: Toluene-d8	50.2		50.00		100	70	130			

Sample ID	lcs-4361		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4361		RunNo: 6338					
Prep Date:	10/17/2012		Analysis Date: 10/17/2012		SeqNo: 182428		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	7.10	1.00	8.000	0	88.8	60	140			
Toluene	6.78	1.00	8.000	0	84.8	60	140			
Chlorobenzene	8.05	1.00	8.000	0	101	60	140			
1,1-Dichloroethene	8.50	1.00	8.000	0	106	60	140			
Trichloroethene (TCE)	6.66	1.00	8.000	0	83.2	60	140			
Surr: 1,2-Dichloroethane-d4	47.3		50.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		86.1	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4361		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4361		RunNo: 6338					
Prep Date:	10/17/2012		Analysis Date: 10/17/2012		SeqNo: 182428		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	52.5		50.00		105	70	130			
Surr: Toluene-d8	43.8		50.00		87.6	70	130			

Sample ID	mb-4393		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4393		RunNo: 6360					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182928		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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182928		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	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4393		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182930		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	70	130			
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	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#: 1210811

29-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: R6432			RunNo: 6432					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 184843		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#: 1210811

29-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: R6432			RunNo: 6432					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 184843		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	11		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R6432			RunNo: 6432					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 184845		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.1	70	130			
Toluene	20	1.0	20.00	0	102	80	120			
Chlorobenzene	19	1.0	20.00	0	94.7	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.8	73.7	122			
Trichloroethene (TCE)	19	1.0	20.00	0	94.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	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#: 1210811

29-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: R6432			RunNo: 6432					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 184845		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID	b6	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R6432			RunNo: 6432					
Prep Date:		Analysis Date: 10/19/2012			SeqNo: 184881		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								

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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID b6	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R6432			RunNo: 6432						
Prep Date:	Analysis Date: 10/19/2012			SeqNo: 184881		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210828-005ams		SampType: MS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R6432		RunNo: 6432					
Prep Date:			Analysis Date: 10/20/2012		SeqNo: 184887		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	66.8	128			
Toluene	22	1.0	20.00	0	111	70	130			
Chlorobenzene	20	1.0	20.00	0	99.8	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	108	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.9		10.00		99.2	70	130			

Sample ID	1210828-005amsd		SampType: MSD		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	BatchQC		Batch ID: R6432		RunNo: 6432					
Prep Date:			Analysis Date: 10/20/2012		SeqNo: 184888		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.8	66.8	128	3.88	16.7	
Toluene	21	1.0	20.00	0	107	70	130	3.39	18.7	
Chlorobenzene	19	1.0	20.00	0	96.3	70	130	3.62	19.5	
1,1-Dichloroethene	20	1.0	20.00	0	97.6	70	130	9.75	16.7	
Trichloroethene (TCE)	19	1.0	20.00	0	94.2	70	130	2.61	17.5	
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	9.7		10.00		96.8	70	130	0	0	
Surr: Toluene-d8	9.8		10.00		98.1	70	130	0	0	

Sample ID	Ics2	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R6432			RunNo: 6432					
Prep Date:		Analysis Date: 10/20/2012			SeqNo: 189689		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.1	70	130			
Toluene	20	1.0	20.00	0	100	80	120			
Chlorobenzene	20	1.0	20.00	0	99.3	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	73.7	122			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.8	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4400	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4400	RunNo:	6384					
Prep Date:	10/18/2012	Analysis Date:	10/21/2012	SeqNo:	183689	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	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4400		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 4400		RunNo: 6384					
Prep Date:	10/18/2012		Analysis Date: 10/21/2012		SeqNo: 183689		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	3.0		3.330		89.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.4	20	131			
Surr: 2-Fluorophenol	2.9		3.330		88.5	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.1	25.6	137			
Surr: Phenol-d5	3.1		3.330		91.7	20.3	132			

Sample ID	lcs-4400		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4400		RunNo: 6384					
Prep Date:	10/18/2012		Analysis Date: 10/21/2012		SeqNo: 183690		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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4400	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 4400			RunNo: 6384					
Prep Date:	10/18/2012	Analysis Date: 10/21/2012			SeqNo: 183690		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.20	1.670	0	84.0	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	81.7	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	76.1	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.4	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.7	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.6	39.1	86.9			
4-Nitrophenol	2.5	0.25	3.330	0	74.6	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.2	36.2	80			
Phenol	2.5	0.20	3.330	0	74.2	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	76.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	85.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.6		3.330		109	21.3	145			
Surr: 2-Fluorobiphenyl	1.8		1.670		109	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.8	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		87.1	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		108	25.6	137			
Surr: Phenol-d5	3.2		3.330		95.9	20.3	132			

Sample ID	1210811-002CMS	SampType: MS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-9 (1.5-2')	Batch ID: 4400			RunNo: 6384					
Prep Date:	10/18/2012	Analysis Date: 10/22/2012			SeqNo: 183711		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.673	0	71.4	25.6	142			
4-Chloro-3-methylphenol	2.4	0.50	3.337	0	71.1	63.7	100			
2-Chlorophenol	2.4	0.20	3.337	0	72.7	22.2	126			
1,4-Dichlorobenzene	1.2	0.20	1.673	0	70.8	12.4	115			
2,4-Dinitrotoluene	1.3	0.50	1.673	0	78.0	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.20	1.673	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.25	3.337	0.09450	69.3	36.7	130			
Pentachlorophenol	2.2	0.40	3.337	0	65.2	15.8	113			
Phenol	2.3	0.20	3.337	0	69.9	25.1	124			
Pyrene	1.1	0.20	1.673	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.20	1.673	0	84.8	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.337		89.9	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.673		88.8	20	131			
Surr: 2-Fluorophenol	2.7		3.337		80.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.673		76.2	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.673		105	25.6	137			
Surr: Phenol-d5	3.0		3.337		89.7	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210811-002CMSD	SampType: MSD		TestCode: EPA Method 8270C: Semivolatiles						
Client ID:	SWMU 1-9 (1.5-2')	Batch ID: 4400		RunNo: 6384						
Prep Date:	10/18/2012	Analysis Date: 10/22/2012		SeqNo: 183712		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.674	0	73.4	25.6	142	2.79	22	
4-Chloro-3-methylphenol	2.3	0.50	3.338	0	68.2	63.7	100	3.99	27.3	
2-Chlorophenol	2.4	0.20	3.338	0	71.5	22.2	126	1.58	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.674	0	66.1	12.4	115	6.82	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.674	0	80.4	14.9	142	3.08	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.674	0	75.8	13.9	136	7.08	22.6	
4-Nitrophenol	2.5	0.25	3.338	0.09450	73.3	36.7	130	5.48	20	
Pentachlorophenol	2.1	0.40	3.338	0	62.8	15.8	113	3.74	27.1	
Phenol	2.1	0.20	3.338	0	64.0	25.1	124	8.86	32.2	
Pyrene	1.2	0.20	1.674	0	71.6	35.8	124	4.33	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.674	0	81.2	30	113	4.27	27.8	
Surr: 2,4,6-Tribromophenol	2.8		3.338		83.7	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.674		90.7	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.338		79.2	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.674		76.3	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.674		96.8	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.338		85.8	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4411		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 4411			RunNo: 6416				
Prep Date:	10/19/2012		Analysis Date: 10/22/2012			SeqNo: 184532		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	10								
Acenaphthylene	ND	10								
Aniline	ND	10								
Anthracene	ND	10								
Azobenzene	ND	10								
Benz(a)anthracene	ND	10								
Benzo(a)pyrene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzoic acid	ND	20								
Benzyl alcohol	ND	10								
Bis(2-chloroethoxy)methane	ND	10								
Bis(2-chloroethyl)ether	ND	10								
Bis(2-chloroisopropyl)ether	ND	10								
Bis(2-ethylhexyl)phthalate	ND	10								
4-Bromophenyl phenyl ether	ND	10								
Butyl benzyl phthalate	ND	10								
Carbazole	ND	10								
4-Chloro-3-methylphenol	ND	10								
4-Chloroaniline	ND	10								
2-Chloronaphthalene	ND	10								
2-Chlorophenol	ND	10								
4-Chlorophenyl phenyl ether	ND	10								
Chrysene	ND	10								
Di-n-butyl phthalate	ND	10								
Di-n-octyl phthalate	ND	20								
Dibenz(a,h)anthracene	ND	10								
Dibenzofuran	ND	10								
1,2-Dichlorobenzene	ND	10								
1,3-Dichlorobenzene	ND	10								
1,4-Dichlorobenzene	ND	10								
3,3'-Dichlorobenzidine	ND	10								
Diethyl phthalate	ND	10								
Dimethyl phthalate	ND	10								
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	ND	20								
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4411		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 4411			RunNo: 6416				
Prep Date:	10/19/2012		Analysis Date: 10/22/2012			SeqNo: 184532	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	10								
Fluorene	ND	10								
Hexachlorobenzene	ND	10								
Hexachlorobutadiene	ND	10								
Hexachlorocyclopentadiene	ND	10								
Hexachloroethane	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Isophorone	ND	10								
1-Methylnaphthalene	ND	10								
2-Methylnaphthalene	ND	10								
2-Methylphenol	ND	10								
3+4-Methylphenol	ND	10								
N-Nitrosodi-n-propylamine	ND	10								
N-Nitrosodimethylamine	ND	10								
N-Nitrosodiphenylamine	ND	10								
Naphthalene	ND	10								
2-Nitroaniline	ND	10								
3-Nitroaniline	ND	10								
4-Nitroaniline	ND	10								
Nitrobenzene	ND	10								
2-Nitrophenol	ND	10								
4-Nitrophenol	ND	10								
Pentachlorophenol	ND	20								
Phenanthrene	ND	10								
Phenol	ND	10								
Pyrene	ND	10								
Pyridine	ND	10								
1,2,4-Trichlorobenzene	ND	10								
2,4,5-Trichlorophenol	ND	10								
2,4,6-Trichlorophenol	ND	10								
Surr: 2,4,6-Tribromophenol	180		200.0		89.0	42.9	124			
Surr: 2-Fluorobiphenyl	74		100.0		73.7	40	108			
Surr: 2-Fluorophenol	130		200.0		63.3	23.6	94.8			
Surr: 4-Terphenyl-d14	75		100.0		74.5	41.9	103			
Surr: Nitrobenzene-d5	91		100.0		90.8	42.6	114			
Surr: Phenol-d5	100		200.0		49.9	20.3	74.7			

Qualifiers:

* 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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4411	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 4411			RunNo: 6416					
Prep Date:	10/19/2012	Analysis Date: 10/22/2012			SeqNo: 184533		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	69	10	100.0	0	69.3	43.3	92			
4-Chloro-3-methylphenol	150	10	200.0	0	72.7	46.3	108			
2-Chlorophenol	130	10	200.0	0	65.3	38	99.3			
1,4-Dichlorobenzene	62	10	100.0	0	61.6	30.8	80.6			
2,4-Dinitrotoluene	73	10	100.0	0	73.1	46.1	117			
N-Nitrosodi-n-propylamine	73	10	100.0	0	73.0	39.3	110			
4-Nitrophenol	80	10	200.0	0	39.8	29.8	67			
Pentachlorophenol	110	20	200.0	0	55.3	32.2	95.7			
Phenol	78	10	200.0	0	39.2	27	64.8			
Pyrene	72	10	100.0	0	71.5	44.7	97.3			
1,2,4-Trichlorobenzene	73	10	100.0	0	72.7	36.6	86.7			
Surr: 2,4,6-Tribromophenol	170		200.0		87.4	42.9	124			
Surr: 2-Fluorobiphenyl	81		100.0		81.3	40	108			
Surr: 2-Fluorophenol	120		200.0		60.0	23.6	94.8			
Surr: 4-Terphenyl-d14	74		100.0		74.1	41.9	103			
Surr: Nitrobenzene-d5	85		100.0		84.8	42.6	114			
Surr: Phenol-d5	100		200.0		50.3	20.3	74.7			

Sample ID	Icsd-4411		SampType: LCSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS02		Batch ID: 4411		RunNo: 6416					
Prep Date:	10/19/2012		Analysis Date: 10/22/2012		SeqNo: 184535		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	63	10	100.0	0	62.5	43.3	92	10.3	25	
4-Chloro-3-methylphenol	140	10	200.0	0	67.6	46.3	108	7.30	32.7	
2-Chlorophenol	120	10	200.0	0	59.8	38	99.3	8.77	20	
1,4-Dichlorobenzene	54	10	100.0	0	53.8	30.8	80.6	13.6	20	
2,4-Dinitrotoluene	70	10	100.0	0	70.2	46.1	117	4.16	29.9	
N-Nitrosodi-n-propylamine	65	10	100.0	0	64.8	39.3	110	11.9	23.1	
4-Nitrophenol	75	10	200.0	0	37.7	29.8	67	5.34	40.5	
Pentachlorophenol	110	20	200.0	0	54.1	32.2	95.7	2.07	37.3	
Phenol	68	10	200.0	0	34.1	27	64.8	14.1	20	
Pyrene	68	10	100.0	0	67.9	44.7	97.3	5.13	26.5	
1,2,4-Trichlorobenzene	67	10	100.0	0	66.7	36.6	86.7	8.58	27.2	
Surr: 2,4,6-Tribromophenol	170		200.0		87.5	42.9	124	0	0	
Surr: 2-Fluorobiphenyl	72		100.0		71.5	40	108	0	0	
Surr: 2-Fluorophenol	110		200.0		53.9	23.6	94.8	0	0	
Surr: 4-Terphenyl-d14	72		100.0		72.5	41.9	103	0	0	
Surr: Nitrobenzene-d5	77		100.0		76.5	42.6	114	0	0	
Surr: Phenol-d5	90		200.0		45.1	20.3	74.7	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4425		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185335		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4425		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185336		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	99.4	80	120			

Sample ID	1210811-014CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 1-16 (0-0.5')		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185361		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1670	0.02118	109	75	125			

Sample ID	1210811-014CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	SWMU 1-16 (0-0.5')		Batch ID: 4425		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185362		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.20	0.033	0.1653	0.02118	109	75	125	1.12	20	

Sample ID	MB-4426		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185363		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-4426		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185364		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	1210859-002CMS		SampType: MS			TestCode: EPA Method 7471: Mercury				
Client ID:	BatchQC		Batch ID: 4426			RunNo: 6443				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185391		Units: mg/kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210859-002CMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	BatchQC	Batch ID:	4426	RunNo:	6443					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185392	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4583		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	4583		RunNo:	6598			
Prep Date:	10/30/2012		Analysis Date:	10/31/2012		SeqNo:	190592		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								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4583		SampType:	LCS		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	LCSS		Batch ID:	4583		RunNo:	6598			
Prep Date:	10/30/2012		Analysis Date:	10/31/2012		SeqNo:	190593		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	24	2.5	25.00	0	96.4	80	120			
Arsenic	25	2.5	25.00	0	102	80	120			
Barium	24	0.10	25.00	0	97.4	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	98.7	80	120			
Iron	25	1.0	25.00	0.8055	96.4	80	120			
Lead	24	0.25	25.00	0	97.2	80	120			
Manganese	24	0.10	25.00	0.03200	96.1	80	120			
Nickel	24	0.50	25.00	0	94.6	80	120			
Selenium	24	2.5	25.00	0	96.0	80	120			
Vanadium	25	2.5	25.00	0	101	80	120			
Zinc	24	2.5	25.00	0	97.8	80	120			

Sample ID	MB-4499		SampType:	MBLK		TestCode:	EPA Method 6010B: Soil Metals			
Client ID:	PBS		Batch ID:	4499		RunNo:	6598			
Prep Date:	10/24/2012		Analysis Date:	10/31/2012		SeqNo:	190715		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								

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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4499	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4499	RunNo:	6598					
Prep Date:	10/24/2012	Analysis Date:	10/31/2012	SeqNo:	190715	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Silver	ND	0.25								
Vanadium	ND	2.5								

Sample ID	LCS-4499	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4499	RunNo:	6598					
Prep Date:	10/24/2012	Analysis Date:	10/31/2012	SeqNo:	190716	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Antimony	27	2.5	25.00	0	108	80	120			
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	26	0.10	25.00	0	104	80	120			
Beryllium	28	0.15	25.00	0.01050	114	80	120			
Cadmium	27	0.10	25.00	0	108	80	120			
Chromium	26	0.30	25.00	0	102	80	120			
Lead	27	0.25	25.00	0	106	80	120			
Manganese	26	0.10	25.00	0.02950	103	80	120			
Nickel	26	0.50	25.00	0	105	80	120			
Selenium	32	2.5	25.00	0	128	80	120			S
Silver	5.1	0.25	5.000	0	101	80	120			
Vanadium	26	2.5	25.00	0.08900	105	80	120			

Sample ID	MB-4499	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4499	RunNo:	6670					
Prep Date:	10/24/2012	Analysis Date:	11/2/2012	SeqNo:	192435	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Cobalt	ND	0.30								
Iron	ND	1.0								
Selenium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4499	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4499	RunNo:	6670					
Prep Date:	10/24/2012	Analysis Date:	11/2/2012	SeqNo:	192436	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	LCS-4499		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 4499		RunNo: 6670					
Prep Date:	10/24/2012		Analysis Date: 11/2/2012		SeqNo: 192436		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cobalt	26	0.30	25.00	0	102	80	120			
Iron	27	1.0	25.00	0	106	80	120			
Selenium	29	2.5	25.00	0	117	80	120			
Zinc	27	2.5	25.00	0	106	80	120			

Sample ID	1210811-016CMS	SampType: MS		TestCode: EPA Method 6010B: Soil Metals						
Client ID:	SWMU 1-17 (0-0.5')	Batch ID: 4499		RunNo: 6670						
Prep Date:	10/24/2012	Analysis Date: 11/2/2012		SeqNo: 192540		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	27	0.30	24.90	0.6732	107	75	125			
Cadmium	26	0.20	24.90	0	105	75	125			
Chromium	33	0.60	24.90	6.613	104	75	125			
Cobalt	28	0.60	24.90	4.089	96.6	75	125			
Lead	23	0.50	24.90	0.8184	89.2	75	125			
Nickel	30	1.0	24.90	6.438	94.0	75	125			
Silver	4.9	0.50	4.979	0	99.3	75	125			
Vanadium	46	5.0	24.90	18.97	109	75	125			
Zinc	40	5.0	24.90	15.37	99.3	75	125			

Sample ID	1210811-016CMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	SWMU 1-17 (0-0.5')		Batch ID: 4499		RunNo: 6670					
Prep Date:	10/24/2012		Analysis Date: 11/2/2012		SeqNo: 192541		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	26	0.30	24.83	0.6732	101	75	125	5.69	20	
Cadmium	25	0.20	24.83	0	100	75	125	4.75	20	
Chromium	30	0.60	24.83	6.613	93.2	75	125	8.99	20	
Cobalt	27	0.60	24.83	4.089	90.7	75	125	5.59	20	
Lead	23	0.50	24.83	0.8184	87.6	75	125	1.99	20	
Nickel	28	1.0	24.83	6.438	86.7	75	125	6.41	20	
Silver	4.7	0.50	4.967	0	95.0	75	125	4.71	20	
Vanadium	42	5.0	24.83	18.97	92.5	75	125	9.29	20	
Zinc	38	5.0	24.83	15.37	89.3	75	125	6.54	20	

Sample ID	1210C58-003CMS		SampType: MS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC		Batch ID: 4583		RunNo: 6663					
Prep Date:	10/30/2012		Analysis Date: 11/2/2012		SeqNo: 192743		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	24	2.5	24.84	2.875	86.2	75	125			
Barium	42	0.10	24.84	12.37	120	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210C58-003CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4583	RunNo:	6663					
Prep Date:	10/30/2012	Analysis Date:	11/2/2012	SeqNo:	192743	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	21	0.10	24.84	0	85.3	75	125			
Chromium	24	0.30	24.84	1.934	89.0	75	125			
Selenium	20	2.5	24.84	0	78.6	75	125			

Sample ID	1210C58-003CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4583	RunNo:	6663					
Prep Date:	10/30/2012	Analysis Date:	11/2/2012	SeqNo:	192744	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	28	2.5	24.62	2.875	102	75	125	14.5	20	
Barium	39	0.10	24.62	12.37	108	75	125	7.61	20	
Cadmium	21	0.10	24.62	0	86.7	75	125	0.763	20	
Chromium	24	0.30	24.62	1.934	90.1	75	125	0.297	20	
Selenium	20	2.5	24.62	0	80.9	75	125	1.99	20	

Sample ID	MB-4745	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4745	RunNo:	6879					
Prep Date:	11/8/2012	Analysis Date:	11/13/2012	SeqNo:	198947	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID	LCS-4745	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4745	RunNo:	6879					
Prep Date:	11/8/2012	Analysis Date:	11/13/2012	SeqNo:	198948	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.6	0.25	5.000	0	112	80	120			

Sample ID	1210C58-003CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4745	RunNo:	6885					
Prep Date:	11/8/2012	Analysis Date:	11/14/2012	SeqNo:	199235	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.4	0.25	4.807	0.06026	91.2	75	125			

Sample ID	1210C58-003CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4745	RunNo:	6885					
Prep Date:	11/8/2012	Analysis Date:	11/14/2012	SeqNo:	199236	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.9	0.25	4.918	0.06026	97.9	75	125	9.20	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#: 1210811

29-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210811-016CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals						
Client ID:	SWMU 1-17 (0-0.5')	Batch ID:	4499	RunNo:	7112						
Prep Date:	10/24/2012	Analysis Date:	11/27/2012	SeqNo:	206181	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Antimony	ND	5.0	24.90	0	0	75	125			S	
Arsenic	28	5.0	24.90	4.739	93.9	75	125				
Selenium	18	5.0	24.90	0	71.6	75	125			S	

Sample ID	1210811-016CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals						
Client ID:	SWMU 1-17 (0-0.5')	Batch ID:	4499	RunNo:	7112						
Prep Date:	10/24/2012	Analysis Date:	11/27/2012	SeqNo:	206182	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Antimony	ND	5.0	24.83	0	0	75	125	0	20	S	
Arsenic	29	5.0	24.83	4.739	99.5	75	125	4.69	20		
Selenium	17	5.0	24.83	0	67.3	75	125	6.49	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#: 1210811

29-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: BatchQC	Batch ID: R6394		RunNo: 6394							
Prep Date:	Analysis Date: 10/20/2012		SeqNo: 184078		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	4.0	0.25	2.500	1.915	82.1	70	130			
Surr: BFB	46		50.00		91.6	70	130			

Sample ID 1210660-001amsd	SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range							
Client ID: BatchQC	Batch ID: R6394		RunNo: 6394							
Prep Date:	Analysis Date: 10/20/2012		SeqNo: 184079		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.8	0.25	2.500	1.915	76.4	70	130	3.70	20	
Surr: BFB	51		50.00		102	70	130	0	0	

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:	1210811
Received by/date:	<i>mg</i> 10/17/12			
Logged By:	Michelle Garcia	10/17/2012 8:00:00 AM	<i>Michelle Garcia</i>	
Completed By:	Michelle Garcia	10/17/2012 9:05:43 AM	<i>Michelle Garcia</i>	
Reviewed By:	<i>mg</i> 10/17/12			

Chain of Custody

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

Log In

- Coolers are present? (see 19. for cooler specific information) Yes ☒ No ☐ NA ☐
- Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
- Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
- Sample(s) in proper container(s)? Yes ☒ No ☐
- Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
- Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
- Was preservative added to bottles? Yes ☐ No ☒ NA ☐
- VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
- Were any sample containers received broken? Yes ☐ No ☒
- Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☒ No ☐
- Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
- Is it clear what analyses were requested? Yes ☒ No ☐
- Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked (1)
for pH: <2 or >12 unless noted
Adjusted? _____
Checked by: *[Signature]*

Special Handling (if applicable)

- 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:	_____		

- Additional remarks:

19. Cooler Information

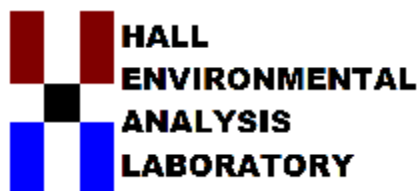
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

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 21, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210856

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-31 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:00:00 PM

Lab ID: 1210856-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 8:45:13 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/21/2012 8:45:13 AM
Surr: DNOP	103	77.6-140		%REC	1	10/21/2012 8:45:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 7:17:23 PM
Surr: BFB	91.0	84-116		%REC	1	10/24/2012 7:17:23 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.063	0.033		mg/kg	1	10/23/2012 6:32:17 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Barium	350	1.0		mg/Kg	10	10/25/2012 1:29:20 PM
Beryllium	0.56	0.30		mg/Kg	2	10/25/2012 11:38:41 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:38:41 AM
Chromium	12	0.60		mg/Kg	2	10/25/2012 11:38:41 AM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 11:38:41 AM
Iron	13000	500		mg/Kg	500	11/2/2012 6:51:37 AM
Lead	5.2	0.50		mg/Kg	2	10/25/2012 11:38:41 AM
Manganese	420	1.0		mg/Kg	10	10/25/2012 1:29:20 PM
Nickel	8.0	1.0		mg/Kg	2	10/25/2012 11:38:41 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 3:19:29 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
Zinc	30	5.0		mg/Kg	2	10/25/2012 11:38:41 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Acenaphthylene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Aniline	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Anthracene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Azobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzoic acid	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-31 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:00:00 PM

Lab ID: 1210856-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Carbazole	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/22/2012 8:48:45 AM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Chrysene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Dibenzofuran	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/22/2012 8:48:45 AM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/22/2012 8:48:45 AM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
Fluoranthene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Fluorene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Hexachloroethane	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Isophorone	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Methylphenol	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Naphthalene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-31 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:00:00 PM

Lab ID: 1210856-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
Nitrobenzene	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/22/2012 8:48:45 AM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/22/2012 8:48:45 AM
Phenanthrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Phenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Pyrene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Pyridine	ND	5.0		mg/Kg	1	10/22/2012 8:48:45 AM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/22/2012 8:48:45 AM
Surr: 2,4,6-Tribromophenol	93.6	21.3-145		%REC	1	10/22/2012 8:48:45 AM
Surr: 2-Fluorobiphenyl	90.8	20-131		%REC	1	10/22/2012 8:48:45 AM
Surr: 2-Fluorophenol	81.9	11.9-130		%REC	1	10/22/2012 8:48:45 AM
Surr: 4-Terphenyl-d14	119	25.1-149		%REC	1	10/22/2012 8:48:45 AM
Surr: Nitrobenzene-d5	91.2	25.6-137		%REC	1	10/22/2012 8:48:45 AM
Surr: Phenol-d5	94.1	20.3-132		%REC	1	10/22/2012 8:48:45 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00119	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Toluene	0.00295	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Ethylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Xylenes, Total	0.00320	0.00168		mg/Kg	1	10/18/2012 1:18:41 PM
Methyl tert-butyl ether (MTBE)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2,4-Trimethylbenzene	0.00138	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,3,5-Trimethylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dichloroethane (EDC)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dibromoethane (EDB)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Naphthalene	ND	0.00168		mg/Kg	1	10/18/2012 1:18:41 PM
1-Methylnaphthalene	ND	0.00335		mg/Kg	1	10/18/2012 1:18:41 PM
2-Methylnaphthalene	ND	0.00335		mg/Kg	1	10/18/2012 1:18:41 PM
Acetone	0.0344	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromodichloromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromoform	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Bromomethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2-Butanone	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
Carbon tetrachloride	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Chlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Chloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-31 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:00:00 PM

Lab ID: 1210856-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Chloromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2-Chlorotoluene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Carbon disulfide	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
4-Chlorotoluene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
cis-1,2-DCE	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
cis-1,3-Dichloropropene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dibromo-3-chloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Dibromochloromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Dibromomethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,3-Dichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,4-Dichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Dichlorodifluoromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1-Dichloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1-Dichloroethene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2-Dichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,3-Dichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2,2-Dichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1-Dichloropropene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Hexachlorobutadiene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Isopropylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
4-Isopropyltoluene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Methylene chloride	ND	0.00252		mg/Kg	1	10/18/2012 1:18:41 PM
n-Butylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
2-Hexanone	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
n-Propylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
sec-Butylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Styrene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
4-Methyl-2-pentanone	ND	0.00838		mg/Kg	1	10/18/2012 1:18:41 PM
tert-Butylbenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,1,2-Tetrachloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,2,2-Tetrachloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Tetrachloroethene (PCE)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
trans-1,2-DCE	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
trans-1,3-Dichloropropene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2,3-Trichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,2,4-Trichlorobenzene	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,1-Trichloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
1,1,2-Trichloroethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Trichloroethene (TCE)	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Trichlorofluoromethane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-31 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:00:00 PM

Lab ID: 1210856-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Vinyl chloride	ND	0.000838		mg/Kg	1	10/18/2012 1:18:41 PM
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	1	10/18/2012 1:18:41 PM
Surr: 4-Bromofluorobenzene	114	70-130		%REC	1	10/18/2012 1:18:41 PM
Surr: Dibromofluoromethane	99.9	70-130		%REC	1	10/18/2012 1:18:41 PM
Surr: Toluene-d8	89.3	70-130		%REC	1	10/18/2012 1:18:41 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	19	9.7		mg/Kg	1	10/21/2012 3:01:01 PM
Motor Oil Range Organics (MRO)	100	48		mg/Kg	1	10/21/2012 3:01:01 PM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 3:01:01 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 11:07:20 PM
Surr: BFB	86.2	84-116		%REC	1	10/24/2012 11:07:20 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.13	0.033		mg/kg	1	10/23/2012 6:34:06 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Barium	600	2.0		mg/Kg	20	10/25/2012 2:44:01 PM
Beryllium	0.64	0.30		mg/Kg	2	10/25/2012 11:43:44 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:43:44 AM
Chromium	17	0.60		mg/Kg	2	10/25/2012 11:43:44 AM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 11:43:44 AM
Iron	14000	500		mg/Kg	500	11/2/2012 6:54:30 AM
Lead	6.3	0.50		mg/Kg	2	10/25/2012 11:43:44 AM
Manganese	440	1.0		mg/Kg	10	10/25/2012 1:34:12 PM
Nickel	13	1.0		mg/Kg	2	10/25/2012 11:43:44 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Silver	ND	0.25		mg/Kg	1	10/29/2012 3:24:30 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
Zinc	36	5.0		mg/Kg	2	10/25/2012 11:43:44 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 5:37:35 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 5:37:35 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 5:37:35 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 5:37:35 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 5:37:35 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 5:37:35 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 5:37:35 PM
Surr: 2,4,6-Tribromophenol	112	21.3-145		%REC	1	10/23/2012 5:37:35 PM
Surr: 2-Fluorobiphenyl	103	20-131		%REC	1	10/23/2012 5:37:35 PM
Surr: 2-Fluorophenol	99.0	11.9-130		%REC	1	10/23/2012 5:37:35 PM
Surr: 4-Terphenyl-d14	126	25.1-149		%REC	1	10/23/2012 5:37:35 PM
Surr: Nitrobenzene-d5	97.0	25.6-137		%REC	1	10/23/2012 5:37:35 PM
Surr: Phenol-d5	102	20.3-132		%REC	1	10/23/2012 5:37:35 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00140	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Toluene	0.00442	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Ethylbenzene	0.00107	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Xylenes, Total	0.00394	0.00165		mg/Kg	1	10/18/2012 1:49:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2,4-Trimethylbenzene	0.00179	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,3,5-Trimethylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dichloroethane (EDC)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dibromoethane (EDB)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Naphthalene	ND	0.00165		mg/Kg	1	10/18/2012 1:49:28 PM
1-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/18/2012 1:49:28 PM
2-Methylnaphthalene	ND	0.00331		mg/Kg	1	10/18/2012 1:49:28 PM
Acetone	0.0551	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromodichloromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromoform	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Bromomethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2-Butanone	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
Carbon tetrachloride	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Chlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Chloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Chloromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2-Chlorotoluene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Carbon disulfide	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
4-Chlorotoluene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
cis-1,2-DCE	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
cis-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dibromo-3-chloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Dibromochloromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Dibromomethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,3-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,4-Dichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Dichlorodifluoromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1-Dichloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1-Dichloroethene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,3-Dichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2,2-Dichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1-Dichloropropene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Hexachlorobutadiene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Isopropylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
4-Isopropyltoluene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Methylene chloride	ND	0.00248		mg/Kg	1	10/18/2012 1:49:28 PM
n-Butylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
2-Hexanone	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
n-Propylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
sec-Butylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Styrene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
4-Methyl-2-pentanone	ND	0.00827		mg/Kg	1	10/18/2012 1:49:28 PM
tert-Butylbenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,1,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,2,2-Tetrachloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Tetrachloroethene (PCE)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
trans-1,2-DCE	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
trans-1,3-Dichloropropene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2,3-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,2,4-Trichlorobenzene	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,1-Trichloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
1,1,2-Trichloroethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Trichloroethene (TCE)	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Trichlorofluoromethane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Vinyl chloride	ND	0.000827		mg/Kg	1	10/18/2012 1:49:28 PM
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	1	10/18/2012 1:49:28 PM
Surr: 4-Bromofluorobenzene	120	70-130		%REC	1	10/18/2012 1:49:28 PM
Surr: Dibromofluoromethane	108	70-130		%REC	1	10/18/2012 1:49:28 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/18/2012 1:49:28 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	29	10		mg/Kg	1	10/21/2012 4:17:09 PM
Motor Oil Range Organics (MRO)	200	51		mg/Kg	1	10/21/2012 4:17:09 PM
Surr: DNOP	112	77.6-140		%REC	1	10/21/2012 4:17:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/24/2012 11:36:04 PM
Surr: BFB	88.3	84-116		%REC	1	10/24/2012 11:36:04 PM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.13	0.033		mg/kg	1	10/23/2012 6:35:52 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Barium	580	2.0		mg/Kg	20	10/25/2012 2:48:50 PM
Beryllium	0.66	0.30		mg/Kg	2	10/25/2012 11:50:31 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:50:31 AM
Chromium	21	0.60		mg/Kg	2	10/25/2012 11:50:31 AM
Cobalt	5.1	0.60		mg/Kg	2	10/25/2012 11:50:31 AM
Iron	19000	500		mg/Kg	500	11/2/2012 6:57:23 AM
Lead	8.0	0.50		mg/Kg	2	10/25/2012 11:50:31 AM
Manganese	540	2.0		mg/Kg	20	10/25/2012 2:48:50 PM
Nickel	16	1.0		mg/Kg	2	10/25/2012 11:50:31 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Silver	ND	0.50		mg/Kg	2	10/29/2012 3:41:51 PM
Vanadium	28	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
Zinc	43	5.0		mg/Kg	2	10/25/2012 11:50:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 6:07:04 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 6:07:04 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 6:07:04 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 6:07:04 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:07:04 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 6:07:04 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:07:04 PM
Surr: 2,4,6-Tribromophenol	95.1	21.3-145		%REC	1	10/23/2012 6:07:04 PM
Surr: 2-Fluorobiphenyl	91.6	20-131		%REC	1	10/23/2012 6:07:04 PM
Surr: 2-Fluorophenol	81.6	11.9-130		%REC	1	10/23/2012 6:07:04 PM
Surr: 4-Terphenyl-d14	120	25.1-149		%REC	1	10/23/2012 6:07:04 PM
Surr: Nitrobenzene-d5	85.6	25.6-137		%REC	1	10/23/2012 6:07:04 PM
Surr: Phenol-d5	86.6	20.3-132		%REC	1	10/23/2012 6:07:04 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00134	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Toluene	0.00384	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Ethylbenzene	0.00105	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Xylenes, Total	0.00404	0.00167		mg/Kg	1	10/18/2012 2:20:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2,4-Trimethylbenzene	0.00207	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,3,5-Trimethylbenzene	0.000842	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dichloroethane (EDC)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dibromoethane (EDB)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Naphthalene	ND	0.00167		mg/Kg	1	10/18/2012 2:20:20 PM
1-Methylnaphthalene	ND	0.00333		mg/Kg	1	10/18/2012 2:20:20 PM
2-Methylnaphthalene	ND	0.00333		mg/Kg	1	10/18/2012 2:20:20 PM
Acetone	0.0483	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromodichloromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromoform	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Bromomethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2-Butanone	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
Carbon tetrachloride	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Chlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Chloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Chloromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2-Chlorotoluene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Carbon disulfide	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
4-Chlorotoluene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
cis-1,2-DCE	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
cis-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dibromo-3-chloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Dibromochloromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Dibromomethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,3-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,4-Dichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Dichlorodifluoromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1-Dichloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1-Dichloroethene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,3-Dichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2,2-Dichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1-Dichloropropene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Hexachlorobutadiene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Isopropylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
4-Isopropyltoluene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Methylene chloride	ND	0.00250		mg/Kg	1	10/18/2012 2:20:20 PM
n-Butylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
2-Hexanone	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
n-Propylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
sec-Butylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Styrene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
4-Methyl-2-pentanone	ND	0.00834		mg/Kg	1	10/18/2012 2:20:20 PM
tert-Butylbenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,1,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,2,2-Tetrachloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Tetrachloroethene (PCE)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
trans-1,2-DCE	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
trans-1,3-Dichloropropene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2,3-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,2,4-Trichlorobenzene	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,1-Trichloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
1,1,2-Trichloroethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Trichloroethene (TCE)	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Trichlorofluoromethane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-32 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 3:40:00 PM

Lab ID: 1210856-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Vinyl chloride	ND	0.000834		mg/Kg	1	10/18/2012 2:20:20 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	1	10/18/2012 2:20:20 PM
Surr: 4-Bromofluorobenzene	126	70-130		%REC	1	10/18/2012 2:20:20 PM
Surr: Dibromofluoromethane	102	70-130		%REC	1	10/18/2012 2:20:20 PM
Surr: Toluene-d8	98.2	70-130		%REC	1	10/18/2012 2:20:20 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-33 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:03:00 PM

Lab ID: 1210856-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	20	9.8		mg/Kg	1	10/21/2012 3:26:23 PM
Motor Oil Range Organics (MRO)	110	49		mg/Kg	1	10/21/2012 3:26:23 PM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 3:26:23 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 12:04:52 AM
Surr: BFB	90.2	84-116		%REC	1	10/25/2012 12:04:52 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.055	0.033		mg/kg	1	10/23/2012 6:37:39 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Barium	680	2.0		mg/Kg	20	10/25/2012 1:52:47 PM
Beryllium	0.64	0.30		mg/Kg	2	10/25/2012 11:55:53 AM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 11:55:53 AM
Chromium	12	0.60		mg/Kg	2	10/25/2012 11:55:53 AM
Cobalt	3.2	0.60		mg/Kg	2	10/25/2012 11:55:53 AM
Iron	13000	500		mg/Kg	500	11/2/2012 7:00:17 AM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 11:55:53 AM
Manganese	800	2.0		mg/Kg	20	10/25/2012 1:52:47 PM
Nickel	8.9	1.0		mg/Kg	2	10/25/2012 11:55:53 AM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Silver	ND	0.25		mg/Kg	1	10/29/2012 3:47:14 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
Zinc	23	5.0		mg/Kg	2	10/25/2012 11:55:53 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-33 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:03:00 PM

Lab ID: 1210856-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 6:36:34 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 6:36:34 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 6:36:34 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-33 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:03:00 PM

Lab ID: 1210856-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 6:36:34 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 6:36:34 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 6:36:34 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 6:36:34 PM
Surr: 2,4,6-Tribromophenol	92.9	21.3-145		%REC	1	10/23/2012 6:36:34 PM
Surr: 2-Fluorobiphenyl	89.4	20-131		%REC	1	10/23/2012 6:36:34 PM
Surr: 2-Fluorophenol	80.5	11.9-130		%REC	1	10/23/2012 6:36:34 PM
Surr: 4-Terphenyl-d14	117	25.1-149		%REC	1	10/23/2012 6:36:34 PM
Surr: Nitrobenzene-d5	85.6	25.6-137		%REC	1	10/23/2012 6:36:34 PM
Surr: Phenol-d5	86.2	20.3-132		%REC	1	10/23/2012 6:36:34 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00146	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Toluene	0.00437	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Ethylbenzene	0.00103	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Xylenes, Total	0.00362	0.00180		mg/Kg	1	10/18/2012 2:51:16 PM
Methyl tert-butyl ether (MTBE)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2,4-Trimethylbenzene	0.00116	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,3,5-Trimethylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dichloroethane (EDC)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dibromoethane (EDB)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Naphthalene	ND	0.00180		mg/Kg	1	10/18/2012 2:51:16 PM
1-Methylnaphthalene	ND	0.00359		mg/Kg	1	10/18/2012 2:51:16 PM
2-Methylnaphthalene	ND	0.00359		mg/Kg	1	10/18/2012 2:51:16 PM
Acetone	0.0526	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromodichloromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromoform	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Bromomethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2-Butanone	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
Carbon tetrachloride	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Chlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Chloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-33 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:03:00 PM

Lab ID: 1210856-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Chloromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2-Chlorotoluene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Carbon disulfide	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
4-Chlorotoluene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
cis-1,2-DCE	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
cis-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dibromo-3-chloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Dibromochloromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Dibromomethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,3-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,4-Dichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Dichlorodifluoromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1-Dichloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1-Dichloroethene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,3-Dichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2,2-Dichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1-Dichloropropene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Hexachlorobutadiene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Isopropylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
4-Isopropyltoluene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Methylene chloride	ND	0.00270		mg/Kg	1	10/18/2012 2:51:16 PM
n-Butylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
2-Hexanone	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
n-Propylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
sec-Butylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Styrene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
4-Methyl-2-pentanone	ND	0.00899		mg/Kg	1	10/18/2012 2:51:16 PM
tert-Butylbenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,1,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,2,2-Tetrachloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Tetrachloroethene (PCE)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
trans-1,2-DCE	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
trans-1,3-Dichloropropene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2,3-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,2,4-Trichlorobenzene	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,1-Trichloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
1,1,2-Trichloroethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Trichloroethene (TCE)	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Trichlorofluoromethane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-33 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:03:00 PM

Lab ID: 1210856-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Vinyl chloride	ND	0.000899		mg/Kg	1	10/18/2012 2:51:16 PM
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%REC	1	10/18/2012 2:51:16 PM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	10/18/2012 2:51:16 PM
Surr: Dibromofluoromethane	95.7	70-130		%REC	1	10/18/2012 2:51:16 PM
Surr: Toluene-d8	86.1	70-130		%REC	1	10/18/2012 2:51:16 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-34 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:30:00 PM

Lab ID: 1210856-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/21/2012 9:35:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2012 9:35:22 AM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 9:35:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 1:30:57 AM
Surr: BFB	90.7	84-116		%REC	1	10/25/2012 1:30:57 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.14	0.033		mg/kg	1	10/23/2012 6:39:27 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Barium	740	2.0		mg/Kg	20	10/25/2012 1:57:39 PM
Beryllium	0.52	0.30		mg/Kg	2	10/25/2012 12:09:46 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:09:46 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 12:09:46 PM
Cobalt	2.7	0.60		mg/Kg	2	10/25/2012 12:09:46 PM
Iron	9800	500		mg/Kg	500	11/2/2012 7:03:09 AM
Lead	2.5	0.50		mg/Kg	2	10/25/2012 12:09:46 PM
Manganese	520	2.0		mg/Kg	20	10/25/2012 1:57:39 PM
Nickel	7.5	1.0		mg/Kg	2	10/25/2012 12:09:46 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Silver	ND	0.25		mg/Kg	1	10/29/2012 3:52:27 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
Zinc	28	5.0		mg/Kg	2	10/25/2012 12:09:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Aniline	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Anthracene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Azobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-34 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:30:00 PM

Lab ID: 1210856-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Carbazole	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/23/2012 7:06:02 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Chrysene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/23/2012 7:06:02 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/23/2012 7:06:02 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Fluorene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Isophorone	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Naphthalene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-34 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:30:00 PM

Lab ID: 1210856-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/23/2012 7:06:02 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:06:02 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Phenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Pyrene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Pyridine	ND	2.5		mg/Kg	1	10/23/2012 7:06:02 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/23/2012 7:06:02 PM
Surr: 2,4,6-Tribromophenol	90.0	21.3-145		%REC	1	10/23/2012 7:06:02 PM
Surr: 2-Fluorobiphenyl	90.4	20-131		%REC	1	10/23/2012 7:06:02 PM
Surr: 2-Fluorophenol	72.4	11.9-130		%REC	1	10/23/2012 7:06:02 PM
Surr: 4-Terphenyl-d14	96.6	25.1-149		%REC	1	10/23/2012 7:06:02 PM
Surr: Nitrobenzene-d5	92.6	25.6-137		%REC	1	10/23/2012 7:06:02 PM
Surr: Phenol-d5	77.7	20.3-132		%REC	1	10/23/2012 7:06:02 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00184	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Toluene	0.00869	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Ethylbenzene	0.00259	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Xylenes, Total	0.00953	0.00212		mg/Kg	1	10/18/2012 3:22:14 PM
Methyl tert-butyl ether (MTBE)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2,4-Trimethylbenzene	0.00524	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,3,5-Trimethylbenzene	0.00196	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dichloroethane (EDC)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dibromoethane (EDB)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Naphthalene	ND	0.00212		mg/Kg	1	10/18/2012 3:22:14 PM
1-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 3:22:14 PM
2-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 3:22:14 PM
Acetone	0.0654	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromodichloromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromoform	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Bromomethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2-Butanone	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
Carbon tetrachloride	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Chlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Chloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-34 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:30:00 PM

Lab ID: 1210856-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Chloromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Carbon disulfide	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
4-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
cis-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
cis-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dibromo-3-chloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Dibromochloromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Dibromomethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,3-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,4-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Dichlorodifluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1-Dichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1-Dichloroethene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,3-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Hexachlorobutadiene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Isopropylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
4-Isopropyltoluene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Methylene chloride	ND	0.00318		mg/Kg	1	10/18/2012 3:22:14 PM
n-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
2-Hexanone	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
n-Propylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
sec-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Styrene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
4-Methyl-2-pentanone	ND	0.0106		mg/Kg	1	10/18/2012 3:22:14 PM
tert-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,1,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,2,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Tetrachloroethene (PCE)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
trans-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
trans-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2,3-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,2,4-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,1-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
1,1,2-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Trichloroethene (TCE)	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Trichlorofluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-34 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 4:30:00 PM

Lab ID: 1210856-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Vinyl chloride	ND	0.00106		mg/Kg	1	10/18/2012 3:22:14 PM
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	1	10/18/2012 3:22:14 PM
Surr: 4-Bromofluorobenzene	129	70-130		%REC	1	10/18/2012 3:22:14 PM
Surr: Dibromofluoromethane	99.7	70-130		%REC	1	10/18/2012 3:22:14 PM
Surr: Toluene-d8	93.7	70-130		%REC	1	10/18/2012 3:22:14 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-36 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 5:00:00 PM

Lab ID: 1210856-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	56	9.6		mg/Kg	1	10/21/2012 3:51:46 PM
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	10/21/2012 3:51:46 PM
Surr: DNOP	112	77.6-140		%REC	1	10/21/2012 3:51:46 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 12:33:35 AM
Surr: BFB	91.0	84-116		%REC	1	10/25/2012 12:33:35 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.20	0.033		mg/kg	1	10/23/2012 6:44:46 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Barium	690	2.0		mg/Kg	20	10/25/2012 2:04:20 PM
Beryllium	0.66	0.30		mg/Kg	2	10/25/2012 12:14:48 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 12:14:48 PM
Chromium	21	0.60		mg/Kg	2	10/25/2012 12:14:48 PM
Cobalt	4.3	0.60		mg/Kg	2	10/25/2012 12:14:48 PM
Iron	16000	500		mg/Kg	500	11/2/2012 7:06:02 AM
Lead	6.8	0.50		mg/Kg	2	10/25/2012 12:14:48 PM
Manganese	580	2.0		mg/Kg	20	10/25/2012 2:04:20 PM
Nickel	12	1.0		mg/Kg	2	10/25/2012 12:14:48 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Silver	ND	0.50		mg/Kg	2	10/29/2012 3:57:34 PM
Vanadium	20	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
Zinc	50	5.0		mg/Kg	2	10/25/2012 12:14:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Acenaphthylene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Aniline	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Anthracene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Azobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benz(a)anthracene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(a)pyrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(b)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(g,h,i)perylene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzo(k)fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzoic acid	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
Benzyl alcohol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Bis(2-chloroethoxy)methane	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Bis(2-chloroethyl)ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Bis(2-chloroisopropyl)ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-36 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 5:00:00 PM

Lab ID: 1210856-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Bromophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Butyl benzyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Carbazole	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Chloro-3-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Chloroaniline	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Chloronaphthalene	ND	2.5		mg/Kg	1	10/23/2012 7:35:28 PM
2-Chlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Chrysene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Di-n-butyl phthalate	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
Di-n-octyl phthalate	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
Dibenz(a,h)anthracene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Dibenzofuran	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,2-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,3-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,4-Dichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
3,3'-Dichlorobenzidine	ND	2.5		mg/Kg	1	10/23/2012 7:35:28 PM
Diethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Dimethyl phthalate	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dichlorophenol	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dimethylphenol	ND	3.0		mg/Kg	1	10/23/2012 7:35:28 PM
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dinitrophenol	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,6-Dinitrotoluene	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
Fluoranthene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Fluorene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachlorobutadiene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachlorocyclopentadiene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Hexachloroethane	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Isophorone	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
1-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Methylnaphthalene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Methylphenol	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
3+4-Methylphenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Naphthalene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-36 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 5:00:00 PM

Lab ID: 1210856-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Nitroaniline	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
Nitrobenzene	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
2-Nitrophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
4-Nitrophenol	ND	2.5		mg/Kg	1	10/23/2012 7:35:28 PM
Pentachlorophenol	ND	4.0		mg/Kg	1	10/23/2012 7:35:28 PM
Phenanthrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Phenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Pyrene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Pyridine	ND	5.0		mg/Kg	1	10/23/2012 7:35:28 PM
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	1	10/23/2012 7:35:28 PM
Surr: 2,4,6-Tribromophenol	99.4	21.3-145		%REC	1	10/23/2012 7:35:28 PM
Surr: 2-Fluorobiphenyl	93.4	20-131		%REC	1	10/23/2012 7:35:28 PM
Surr: 2-Fluorophenol	84.2	11.9-130		%REC	1	10/23/2012 7:35:28 PM
Surr: 4-Terphenyl-d14	114	25.1-149		%REC	1	10/23/2012 7:35:28 PM
Surr: Nitrobenzene-d5	92.8	25.6-137		%REC	1	10/23/2012 7:35:28 PM
Surr: Phenol-d5	92.1	20.3-132		%REC	1	10/23/2012 7:35:28 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00251	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Toluene	0.00652	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Ethylbenzene	0.00147	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Xylenes, Total	0.00610	0.00189		mg/Kg	1	10/19/2012 12:06:15 PM
Methyl tert-butyl ether (MTBE)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2,4-Trimethylbenzene	0.00313	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,3,5-Trimethylbenzene	0.00115	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dichloroethane (EDC)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dibromoethane (EDB)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Naphthalene	ND	0.00189		mg/Kg	1	10/19/2012 12:06:15 PM
1-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/19/2012 12:06:15 PM
2-Methylnaphthalene	ND	0.00378		mg/Kg	1	10/19/2012 12:06:15 PM
Acetone	0.0535	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromodichloromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromoform	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Bromomethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2-Butanone	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
Carbon tetrachloride	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Chlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Chloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-36 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 5:00:00 PM

Lab ID: 1210856-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Chloromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2-Chlorotoluene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Carbon disulfide	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
4-Chlorotoluene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
cis-1,2-DCE	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
cis-1,3-Dichloropropene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dibromo-3-chloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Dibromochloromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Dibromomethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,3-Dichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,4-Dichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Dichlorodifluoromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1-Dichloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1-Dichloroethene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2-Dichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,3-Dichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2,2-Dichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1-Dichloropropene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Hexachlorobutadiene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Isopropylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
4-Isopropyltoluene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Methylene chloride	ND	0.00284		mg/Kg	1	10/19/2012 12:06:15 PM
n-Butylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
2-Hexanone	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
n-Propylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
sec-Butylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Styrene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
4-Methyl-2-pentanone	ND	0.00945		mg/Kg	1	10/19/2012 12:06:15 PM
tert-Butylbenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,1,2-Tetrachloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,2,2-Tetrachloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Tetrachloroethene (PCE)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
trans-1,2-DCE	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
trans-1,3-Dichloropropene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2,3-Trichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,2,4-Trichlorobenzene	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,1-Trichloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
1,1,2-Trichloroethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Trichloroethene (TCE)	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Trichlorofluoromethane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 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 1210856

Date Reported: 11/21/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-36 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 5:00:00 PM

Lab ID: 1210856-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Vinyl chloride	ND	0.000945		mg/Kg	1	10/19/2012 12:06:15 PM
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%REC	1	10/19/2012 12:06:15 PM
Surr: 4-Bromofluorobenzene	133	70-130	S	%REC	1	10/19/2012 12:06:15 PM
Surr: Dibromofluoromethane	107	70-130		%REC	1	10/19/2012 12:06:15 PM
Surr: Toluene-d8	107	70-130		%REC	1	10/19/2012 12:06:15 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

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 #: 121019045
Project Name: 1210856

Analytical Results Report

Sample Number	121019045-001	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM		
Client Sample ID	1210856-001D / SWMU 1-31 (0-0.5)	Sampling Time	3:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.256	mg/Kg	0.252	10/30/2012	CRW	EPA 335.4	
%moisture	1.4	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019045-002	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM		
Client Sample ID	1210856-002D / SWMU 1-32 (0-0.5)	Sampling Time	3:40 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.247	10/30/2012	CRW	EPA 335.4	
%moisture	1	Percent		10/30/2012	TGT	%moisture	

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

Batch #: 121019045
Project Name: 1210856

Analytical Results Report

Sample Number	121019045-003	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210856-003D / SWMU 1-32 (0-0.5) DUP	Sampling Time	3:40 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.253	10/30/2012	CRW	EPA 335.4	
%moisture	1.5	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019045-004	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210856-004D / SWMU 1-33 (0-0.5)	Sampling Time	4:03 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.243	10/30/2012	CRW	EPA 335.4	
%moisture	2.2	Percent		10/30/2012	TGT	%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

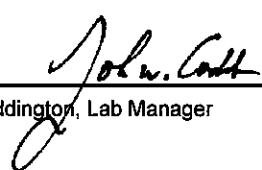
Batch #: 121019045
Project Name: 1210856

Analytical Results Report

Sample Number	121019045-005	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM		
Client Sample ID	1210856-005D / SWMU 1-34 (0-0.5)	Sampling Time	4:30 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.251	10/30/2012	CRW	EPA 335.4	
%moisture	1.6	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019045-006	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM		
Client Sample ID	1210856-006D / SWMU 1-36 (0-0.5)	Sampling Time	5:00 PM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.663	mg/Kg	0.255	10/30/2012	CRW	EPA 335.4	
%moisture	1.5	Percent		10/30/2012	TGT	%moisture	

Authorized Signature


John Coddington, Lab Manager

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

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4369		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4369		RunNo: 6325					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182210		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		102	77.6	140			

Sample ID	LCS-4369		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4369		RunNo: 6325					
Prep Date:	10/17/2012		Analysis Date: 10/18/2012		SeqNo: 182211		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.6	77.6	140			

Sample ID	MB-4397		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4397		RunNo: 6325					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182283		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID	LCS-4397		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4397		RunNo: 6325					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182284		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	52.6	130			
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID	MB-4404		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182984		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID	LCS-4404		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182985		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210819-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	4404	RunNo:	6356					
Prep Date:	10/18/2012	Analysis Date:	10/19/2012	SeqNo:	183001	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	1210819-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	4404	RunNo:	6356					
Prep Date:	10/18/2012	Analysis Date:	10/19/2012	SeqNo:	183002	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210856

21-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:	R6457	RunNo:	6457					
Prep Date:		Analysis Date:	10/24/2012	SeqNo:	186219	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	920		1000		91.7	84	116			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	R6457	RunNo:	6457					
Prep Date:		Analysis Date:	10/24/2012	SeqNo:	186225	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.5	74	117			
Surr: BFB	930		1000		93.1	84	116			

Sample ID	1210811-011BMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6457	RunNo:	6457					
Prep Date:		Analysis Date:	10/24/2012	SeqNo:	186249	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	5.0	15.90	0	110	70	130	12.7	22.1	
Surr: BFB	590		636.0		93.2	84	116	0	0	

Sample ID	1210811-011BMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6457	RunNo:	6487					
Prep Date:		Analysis Date:	10/25/2012	SeqNo:	187647	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.91	0	96.6	70	130			
Surr: BFB	650		636.4		102	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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182928		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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182928		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	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Sample ID	lcs-4393		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182930		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4393		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4393		RunNo: 6360					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182930		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	70	130			

Sample ID	mb-4419		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4419		RunNo: 6365					
Prep Date:	10/19/2012		Analysis Date: 10/19/2012		SeqNo: 183060		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4419		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4419		RunNo: 6365					
Prep Date:	10/19/2012		Analysis Date: 10/19/2012		SeqNo: 183060		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.00320	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.7		50.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		85.9	70	130			
Surr: Dibromofluoromethane	50.0		50.00		100	70	130			
Surr: Toluene-d8	51.0		50.00		102	70	130			

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4419		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 4419			RunNo: 6365				
Prep Date:	10/19/2012		Analysis Date: 10/19/2012			SeqNo: 183062		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.7	1.00	12.50	0	93.9	60	140			
Toluene	10.2	1.00	12.50	0	82.0	60	140			
Chlorobenzene	11.9	1.00	12.50	0	94.9	60	140			
1,1-Dichloroethene	14.5	1.00	12.50	0	116	60	140			
Trichloroethene (TCE)	9.39	1.00	12.50	0	75.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.4		50.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	41.6		50.00		83.2	70	130			
Surr: Dibromofluoromethane	46.8		50.00		93.6	70	130			
Surr: Toluene-d8	46.1		50.00		92.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4400	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4400	RunNo:	6384					
Prep Date:	10/18/2012	Analysis Date:	10/21/2012	SeqNo:	183689	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	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4400		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 4400		RunNo: 6384					
Prep Date:	10/18/2012		Analysis Date: 10/21/2012		SeqNo: 183689		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	3.0		3.330		89.4	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		94.4	20	131			
Surr: 2-Fluorophenol	2.9		3.330		88.5	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.3	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.1	25.6	137			
Surr: Phenol-d5	3.1		3.330		91.7	20.3	132			

Sample ID	lcs-4400		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4400		RunNo: 6384					
Prep Date:	10/18/2012		Analysis Date: 10/21/2012		SeqNo: 183690		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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4400	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS	Batch ID: 4400			RunNo: 6384					
Prep Date:	10/18/2012	Analysis Date: 10/21/2012			SeqNo: 183690		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.4	0.20	1.670	0	84.0	49.7	98.1			
4-Chloro-3-methylphenol	2.7	0.50	3.330	0	81.7	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	76.1	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	75.4	41	97.4			
2,4-Dinitrotoluene	1.5	0.50	1.670	0	89.7	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.6	39.1	86.9			
4-Nitrophenol	2.5	0.25	3.330	0	74.6	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	64.2	36.2	80			
Phenol	2.5	0.20	3.330	0	74.2	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	76.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.4	0.20	1.670	0	85.3	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.6		3.330		109	21.3	145			
Surr: 2-Fluorobiphenyl	1.8		1.670		109	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.8	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		87.1	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		108	25.6	137			
Surr: Phenol-d5	3.2		3.330		95.9	20.3	132			

Sample ID	1210811-002CMS		SampType: MS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC		Batch ID: 4400		RunNo: 6384					
Prep Date:	10/18/2012		Analysis Date: 10/22/2012		SeqNo: 183711		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.673	0	71.4	25.6	142			
4-Chloro-3-methylphenol	2.4	0.50	3.337	0	71.1	63.7	100			
2-Chlorophenol	2.4	0.20	3.337	0	72.7	22.2	126			
1,4-Dichlorobenzene	1.2	0.20	1.673	0	70.8	12.4	115			
2,4-Dinitrotoluene	1.3	0.50	1.673	0	78.0	14.9	142			
N-Nitrosodi-n-propylamine	1.4	0.20	1.673	0	81.4	13.9	136			
4-Nitrophenol	2.4	0.25	3.337	0.09450	69.3	36.7	130			
Pentachlorophenol	2.2	0.40	3.337	0	65.2	15.8	113			
Phenol	2.3	0.20	3.337	0	69.9	25.1	124			
Pyrene	1.1	0.20	1.673	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.4	0.20	1.673	0	84.8	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.337		89.9	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.673		88.8	20	131			
Surr: 2-Fluorophenol	2.7		3.337		80.1	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.673		76.2	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.673		105	25.6	137			
Surr: Phenol-d5	3.0		3.337		89.7	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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210811-002CMSD		SampType: MSD		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC		Batch ID: 4400		RunNo: 6384					
Prep Date:	10/18/2012		Analysis Date: 10/22/2012		SeqNo: 183712		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.674	0	73.4	25.6	142	2.79	22	
4-Chloro-3-methylphenol	2.3	0.50	3.338	0	68.2	63.7	100	3.99	27.3	
2-Chlorophenol	2.4	0.20	3.338	0	71.5	22.2	126	1.58	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.674	0	66.1	12.4	115	6.82	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.674	0	80.4	14.9	142	3.08	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.674	0	75.8	13.9	136	7.08	22.6	
4-Nitrophenol	2.5	0.25	3.338	0.09450	73.3	36.7	130	5.48	20	
Pentachlorophenol	2.1	0.40	3.338	0	62.8	15.8	113	3.74	27.1	
Phenol	2.1	0.20	3.338	0	64.0	25.1	124	8.86	32.2	
Pyrene	1.2	0.20	1.674	0	71.6	35.8	124	4.33	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.674	0	81.2	30	113	4.27	27.8	
Surr: 2,4,6-Tribromophenol	2.8		3.338		83.7	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.674		90.7	20	131	0	0	
Surr: 2-Fluorophenol	2.6		3.338		79.2	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.3		1.674		76.3	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.674		96.8	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.338		85.8	20.3	132	0	0	

Sample ID	Ics-4422		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4422		RunNo: 6445					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185414		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4422		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	4422		RunNo:	6445			
Prep Date:	10/19/2012		Analysis Date:	10/23/2012		SeqNo:	185416		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4422		SampType:	MBLK		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	PBS		Batch ID:	4422		RunNo:	6445			
Prep Date:	10/19/2012		Analysis Date:	10/23/2012		SeqNo:	185416		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID	1210858-004Cms		SampType:	MS		TestCode:	EPA Method 8270C: Semivolatiles			
Client ID:	BatchQC		Batch ID:	4422		RunNo:	6445			
Prep Date:	10/19/2012		Analysis Date:	10/23/2012		SeqNo:	185433		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210858-004Cms	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185433	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Sample ID	1210858-004Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185434	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210856

21-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4426		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185363		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4426		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185364		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	1210859-002CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185391		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Sample ID	1210859-002CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185392		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	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#: 1210856

21-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#: 1210856

21-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/Kg			
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/Kg			
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:

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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#: 1210856

21-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 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: 1210856

Received by/date: 10/18/12

Logged By: Michelle Garcia

10/18/2012 8:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia

10/18/2012 8:42:47 AM

Michelle Garcia

Reviewed By: [Signature]

10/18/12

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

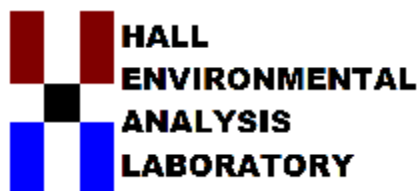
Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. Cooler Information

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



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

November 13, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210858

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 8 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:00:00 AM

Lab ID: 1210858-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 1:57:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2012 1:57:12 PM
Surr: DNOP	96.0	77.6-140		%REC	1	10/19/2012 1:57:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 1:59:36 AM
Surr: BFB	90.4	84-116		%REC	1	10/25/2012 1:59:36 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:46:33 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Barium	700	2.0		mg/Kg	20	10/25/2012 4:53:22 PM
Beryllium	0.35	0.30		mg/Kg	2	10/25/2012 4:50:20 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 4:50:20 PM
Chromium	3.4	0.60		mg/Kg	2	10/25/2012 4:50:20 PM
Cobalt	1.9	0.60		mg/Kg	2	10/25/2012 4:50:20 PM
Iron	3600	500		mg/Kg	500	10/25/2012 4:56:13 PM
Lead	ND	0.50		mg/Kg	2	10/25/2012 4:50:20 PM
Manganese	300	2.0		mg/Kg	20	10/25/2012 4:53:22 PM
Nickel	3.6	1.0		mg/Kg	2	10/25/2012 4:50:20 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Silver	ND	0.50		mg/Kg	2	10/25/2012 4:50:20 PM
Vanadium	11	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
Zinc	11	5.0		mg/Kg	2	10/25/2012 4:50:20 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:00:00 AM

Lab ID: 1210858-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 8:04:59 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 8:04:59 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 8:04:59 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:00:00 AM

Lab ID: 1210858-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 8:04:59 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:04:59 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 8:04:59 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:04:59 PM
Surr: 2,4,6-Tribromophenol	66.5	21.3-145		%REC	1	10/23/2012 8:04:59 PM
Surr: 2-Fluorobiphenyl	67.0	20-131		%REC	1	10/23/2012 8:04:59 PM
Surr: 2-Fluorophenol	60.4	11.9-130		%REC	1	10/23/2012 8:04:59 PM
Surr: 4-Terphenyl-d14	62.7	25.1-149		%REC	1	10/23/2012 8:04:59 PM
Surr: Nitrobenzene-d5	71.7	25.6-137		%REC	1	10/23/2012 8:04:59 PM
Surr: Phenol-d5	68.7	20.3-132		%REC	1	10/23/2012 8:04:59 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00109	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Toluene	0.00687	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Ethylbenzene	0.00386	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Xylenes, Total	0.0210	0.00144		mg/Kg	1	10/19/2012 12:37:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2,4-Trimethylbenzene	0.00455	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,3,5-Trimethylbenzene	0.00192	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dichloroethane (EDC)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dibromoethane (EDB)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Naphthalene	ND	0.00144		mg/Kg	1	10/19/2012 12:37:00 PM
1-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/19/2012 12:37:00 PM
2-Methylnaphthalene	ND	0.00288		mg/Kg	1	10/19/2012 12:37:00 PM
Acetone	0.148	0.00719	E	mg/Kg	1	10/19/2012 12:37:00 PM
Bromobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Bromodichloromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Bromoform	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Bromomethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2-Butanone	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
Carbon tetrachloride	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Chlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Chloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:00:00 AM

Lab ID: 1210858-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Chloromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2-Chlorotoluene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Carbon disulfide	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
4-Chlorotoluene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
cis-1,2-DCE	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
cis-1,3-Dichloropropene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dibromo-3-chloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Dibromochloromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Dibromomethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,3-Dichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,4-Dichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Dichlorodifluoromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1-Dichloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1-Dichloroethene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2-Dichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,3-Dichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2,2-Dichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1-Dichloropropene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Hexachlorobutadiene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Isopropylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
4-Isopropyltoluene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Methylene chloride	ND	0.00216		mg/Kg	1	10/19/2012 12:37:00 PM
n-Butylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
2-Hexanone	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
n-Propylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
sec-Butylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Styrene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
4-Methyl-2-pentanone	ND	0.00719		mg/Kg	1	10/19/2012 12:37:00 PM
tert-Butylbenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,1,2-Tetrachloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,2,2-Tetrachloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Tetrachloroethene (PCE)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
trans-1,2-DCE	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
trans-1,3-Dichloropropene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2,3-Trichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,2,4-Trichlorobenzene	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,1-Trichloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
1,1,2-Trichloroethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Trichloroethene (TCE)	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Trichlorofluoromethane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:00:00 AM

Lab ID: 1210858-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Vinyl chloride	ND	0.000719		mg/Kg	1	10/19/2012 12:37:00 PM
Surr: 1,2-Dichloroethane-d4	86.5	70-130		%REC	1	10/19/2012 12:37:00 PM
Surr: 4-Bromofluorobenzene	121	70-130		%REC	1	10/19/2012 12:37:00 PM
Surr: Dibromofluoromethane	97.8	70-130		%REC	1	10/19/2012 12:37:00 PM
Surr: Toluene-d8	102	70-130		%REC	1	10/19/2012 12:37:00 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:10:00 AM

Lab ID: 1210858-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 2:22:14 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2012 2:22:14 PM
Surr: DNOP	92.8	77.6-140		%REC	1	10/19/2012 2:22:14 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 2:28:14 AM
Surr: BFB	89.9	84-116		%REC	1	10/25/2012 2:28:14 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:48:19 PM
EPA METHOD 6010B: SOIL METALS						Analyst: ELS
Antimony	ND	12		mg/Kg	5	10/29/2012 4:05:34 PM
Arsenic	ND	12		mg/Kg	5	10/29/2012 4:05:34 PM
Barium	340	2.0		mg/Kg	20	10/25/2012 5:06:32 PM
Beryllium	ND	0.75		mg/Kg	5	10/29/2012 4:05:34 PM
Cadmium	ND	0.50		mg/Kg	5	10/29/2012 4:05:34 PM
Chromium	9.2	1.5		mg/Kg	5	10/29/2012 4:05:34 PM
Cobalt	3.8	1.5		mg/Kg	5	10/29/2012 4:05:34 PM
Iron	11000	500		mg/Kg	500	10/25/2012 5:20:33 PM
Lead	6.1	1.2		mg/Kg	5	10/29/2012 4:05:34 PM
Manganese	1500	5.0		mg/Kg	50	10/29/2012 4:18:19 PM
Nickel	6.4	2.5		mg/Kg	5	10/29/2012 4:05:34 PM
Selenium	ND	12		mg/Kg	5	10/29/2012 4:05:34 PM
Silver	ND	1.2		mg/Kg	5	10/29/2012 4:05:34 PM
Vanadium	20	12		mg/Kg	5	10/29/2012 4:05:34 PM
Zinc	15	12		mg/Kg	5	10/29/2012 4:05:34 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:10:00 AM

Lab ID: 1210858-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 8:34:29 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 8:34:29 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 8:34:29 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:10:00 AM

Lab ID: 1210858-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 8:34:29 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 8:34:29 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 8:34:29 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 8:34:29 PM
Surr: 2,4,6-Tribromophenol	77.5	21.3-145		%REC	1	10/23/2012 8:34:29 PM
Surr: 2-Fluorobiphenyl	80.3	20-131		%REC	1	10/23/2012 8:34:29 PM
Surr: 2-Fluorophenol	73.9	11.9-130		%REC	1	10/23/2012 8:34:29 PM
Surr: 4-Terphenyl-d14	71.0	25.1-149		%REC	1	10/23/2012 8:34:29 PM
Surr: Nitrobenzene-d5	82.0	25.6-137		%REC	1	10/23/2012 8:34:29 PM
Surr: Phenol-d5	78.3	20.3-132		%REC	1	10/23/2012 8:34:29 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00160	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Toluene	0.00190	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Ethylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Xylenes, Total	0.00154	0.00149		mg/Kg	1	10/18/2012 4:54:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2,4-Trimethylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,3,5-Trimethylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dichloroethane (EDC)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dibromoethane (EDB)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Naphthalene	ND	0.00149		mg/Kg	1	10/18/2012 4:54:54 PM
1-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/18/2012 4:54:54 PM
2-Methylnaphthalene	ND	0.00299		mg/Kg	1	10/18/2012 4:54:54 PM
Acetone	0.0512	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromodichloromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromoform	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Bromomethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2-Butanone	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
Carbon tetrachloride	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Chlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Chloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:10:00 AM

Lab ID: 1210858-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Chloromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2-Chlorotoluene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Carbon disulfide	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
4-Chlorotoluene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
cis-1,2-DCE	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
cis-1,3-Dichloropropene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dibromo-3-chloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Dibromochloromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Dibromomethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,3-Dichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,4-Dichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Dichlorodifluoromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1-Dichloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1-Dichloroethene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2-Dichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,3-Dichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2,2-Dichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1-Dichloropropene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Hexachlorobutadiene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Isopropylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
4-Isopropyltoluene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Methylene chloride	ND	0.00224		mg/Kg	1	10/18/2012 4:54:54 PM
n-Butylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
2-Hexanone	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
n-Propylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
sec-Butylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Styrene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
4-Methyl-2-pentanone	ND	0.00747		mg/Kg	1	10/18/2012 4:54:54 PM
tert-Butylbenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,1,2-Tetrachloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,2,2-Tetrachloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Tetrachloroethene (PCE)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
trans-1,2-DCE	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
trans-1,3-Dichloropropene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2,3-Trichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,2,4-Trichlorobenzene	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,1-Trichloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
1,1,2-Trichloroethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Trichloroethene (TCE)	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Trichlorofluoromethane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-18 (1-1.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:10:00 AM

Lab ID: 1210858-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Vinyl chloride	ND	0.000747		mg/Kg	1	10/18/2012 4:54:54 PM
Surr: 1,2-Dichloroethane-d4	86.8	70-130		%REC	1	10/18/2012 4:54:54 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	10/18/2012 4:54:54 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/18/2012 4:54:54 PM
Surr: Toluene-d8	97.2	70-130		%REC	1	10/18/2012 4:54:54 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-19 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:35:00 AM

Lab ID: 1210858-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 6:14:50 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/21/2012 6:14:50 AM
Surr: DNOP	104	77.6-140		%REC	1	10/21/2012 6:14:50 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 2:57:02 AM
Surr: BFB	89.7	84-116		%REC	1	10/25/2012 2:57:02 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.056	0.033		mg/kg	1	10/23/2012 6:50:07 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Barium	530	2.0		mg/Kg	20	10/25/2012 5:29:06 PM
Beryllium	0.68	0.30		mg/Kg	2	10/25/2012 5:26:14 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 5:26:14 PM
Chromium	13	0.60		mg/Kg	2	10/25/2012 5:26:14 PM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 5:26:14 PM
Iron	13000	500		mg/Kg	500	10/25/2012 5:31:45 PM
Lead	2.8	0.50		mg/Kg	2	10/25/2012 5:26:14 PM
Manganese	550	2.0		mg/Kg	20	10/25/2012 5:29:06 PM
Nickel	6.5	1.0		mg/Kg	2	10/25/2012 5:26:14 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Silver	ND	1.2		mg/Kg	5	10/31/2012 1:29:43 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
Zinc	25	5.0		mg/Kg	2	10/25/2012 5:26:14 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Aniline	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Anthracene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Azobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-19 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:35:00 AM

Lab ID: 1210858-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Carbazole	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/23/2012 9:03:58 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Chrysene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/23/2012 9:03:58 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/23/2012 9:03:58 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Fluorene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Isophorone	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Naphthalene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-19 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:35:00 AM

Lab ID: 1210858-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/23/2012 9:03:58 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/23/2012 9:03:58 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Phenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Pyrene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Pyridine	ND	1.0		mg/Kg	1	10/23/2012 9:03:58 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:03:58 PM
Surr: 2,4,6-Tribromophenol	80.0	21.3-145		%REC	1	10/23/2012 9:03:58 PM
Surr: 2-Fluorobiphenyl	88.3	20-131		%REC	1	10/23/2012 9:03:58 PM
Surr: 2-Fluorophenol	82.3	11.9-130		%REC	1	10/23/2012 9:03:58 PM
Surr: 4-Terphenyl-d14	75.6	25.1-149		%REC	1	10/23/2012 9:03:58 PM
Surr: Nitrobenzene-d5	91.0	25.6-137		%REC	1	10/23/2012 9:03:58 PM
Surr: Phenol-d5	85.5	20.3-132		%REC	1	10/23/2012 9:03:58 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00225	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Toluene	0.00290	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Ethylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Xylenes, Total	ND	0.00193		mg/Kg	1	10/18/2012 5:25:43 PM
Methyl tert-butyl ether (MTBE)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2,4-Trimethylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,3,5-Trimethylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dichloroethane (EDC)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dibromoethane (EDB)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Naphthalene	ND	0.00193		mg/Kg	1	10/18/2012 5:25:43 PM
1-Methylnaphthalene	ND	0.00386		mg/Kg	1	10/18/2012 5:25:43 PM
2-Methylnaphthalene	ND	0.00386		mg/Kg	1	10/18/2012 5:25:43 PM
Acetone	0.0988	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromodichloromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromoform	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Bromomethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2-Butanone	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
Carbon tetrachloride	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Chlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Chloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-19 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:35:00 AM

Lab ID: 1210858-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Chloromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2-Chlorotoluene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Carbon disulfide	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
4-Chlorotoluene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
cis-1,2-DCE	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
cis-1,3-Dichloropropene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dibromo-3-chloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Dibromochloromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Dibromomethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,3-Dichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,4-Dichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Dichlorodifluoromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1-Dichloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1-Dichloroethene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2-Dichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,3-Dichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2,2-Dichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1-Dichloropropene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Hexachlorobutadiene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Isopropylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
4-Isopropyltoluene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Methylene chloride	ND	0.00290		mg/Kg	1	10/18/2012 5:25:43 PM
n-Butylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
2-Hexanone	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
n-Propylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
sec-Butylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Styrene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
4-Methyl-2-pentanone	ND	0.00966		mg/Kg	1	10/18/2012 5:25:43 PM
tert-Butylbenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,1,2-Tetrachloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,2,2-Tetrachloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Tetrachloroethene (PCE)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
trans-1,2-DCE	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
trans-1,3-Dichloropropene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2,3-Trichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,2,4-Trichlorobenzene	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,1-Trichloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
1,1,2-Trichloroethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Trichloroethene (TCE)	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Trichlorofluoromethane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-19 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 10:35:00 AM

Lab ID: 1210858-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Vinyl chloride	ND	0.000966		mg/Kg	1	10/18/2012 5:25:43 PM
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%REC	1	10/18/2012 5:25:43 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	10/18/2012 5:25:43 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/18/2012 5:25:43 PM
Surr: Toluene-d8	94.1	70-130		%REC	1	10/18/2012 5:25:43 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 11:44:48 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/19/2012 11:44:48 AM
Surr: DNOP	96.8	77.6-140		%REC	1	10/19/2012 11:44:48 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 3:25:48 AM
Surr: BFB	89.2	84-116		%REC	1	10/25/2012 3:25:48 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:51:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Barium	440	2.0		mg/Kg	20	10/25/2012 5:42:05 PM
Beryllium	0.77	0.30		mg/Kg	2	10/25/2012 5:39:12 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 5:39:12 PM
Chromium	9.9	0.60		mg/Kg	2	10/25/2012 5:39:12 PM
Cobalt	4.1	0.60		mg/Kg	2	10/25/2012 5:39:12 PM
Iron	14000	500		mg/Kg	500	10/25/2012 5:44:46 PM
Lead	2.6	0.50		mg/Kg	2	10/25/2012 5:39:12 PM
Manganese	450	2.0		mg/Kg	20	10/25/2012 5:42:05 PM
Nickel	7.5	1.0		mg/Kg	2	10/25/2012 5:39:12 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:44:15 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
Zinc	17	5.0		mg/Kg	2	10/25/2012 5:39:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 9:33:26 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 9:33:26 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 9:33:26 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 9:33:26 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 9:33:26 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 9:33:26 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 9:33:26 PM
Surr: 2,4,6-Tribromophenol	77.7	21.3-145		%REC	1	10/23/2012 9:33:26 PM
Surr: 2-Fluorobiphenyl	77.7	20-131		%REC	1	10/23/2012 9:33:26 PM
Surr: 2-Fluorophenol	75.5	11.9-130		%REC	1	10/23/2012 9:33:26 PM
Surr: 4-Terphenyl-d14	74.2	25.1-149		%REC	1	10/23/2012 9:33:26 PM
Surr: Nitrobenzene-d5	89.9	25.6-137		%REC	1	10/23/2012 9:33:26 PM
Surr: Phenol-d5	82.2	20.3-132		%REC	1	10/23/2012 9:33:26 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00183	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Toluene	0.00147	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Ethylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Xylenes, Total	ND	0.00208		mg/Kg	1	10/18/2012 5:56:28 PM
Methyl tert-butyl ether (MTBE)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2,4-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,3,5-Trimethylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dichloroethane (EDC)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dibromoethane (EDB)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Naphthalene	ND	0.00208		mg/Kg	1	10/18/2012 5:56:28 PM
1-Methylnaphthalene	ND	0.00416		mg/Kg	1	10/18/2012 5:56:28 PM
2-Methylnaphthalene	ND	0.00416		mg/Kg	1	10/18/2012 5:56:28 PM
Acetone	0.0144	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromodichloromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromoform	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Bromomethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2-Butanone	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
Carbon tetrachloride	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Chlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Chloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Chloromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2-Chlorotoluene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Carbon disulfide	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
4-Chlorotoluene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
cis-1,2-DCE	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
cis-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dibromo-3-chloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Dibromochloromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Dibromomethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,3-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,4-Dichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Dichlorodifluoromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1-Dichloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1-Dichloroethene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,3-Dichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2,2-Dichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1-Dichloropropene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Hexachlorobutadiene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Isopropylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
4-Isopropyltoluene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Methylene chloride	ND	0.00312		mg/Kg	1	10/18/2012 5:56:28 PM
n-Butylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
2-Hexanone	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
n-Propylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
sec-Butylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Styrene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
4-Methyl-2-pentanone	ND	0.0104		mg/Kg	1	10/18/2012 5:56:28 PM
tert-Butylbenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,1,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,2,2-Tetrachloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Tetrachloroethene (PCE)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
trans-1,2-DCE	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
trans-1,3-Dichloropropene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2,3-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,2,4-Trichlorobenzene	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,1-Trichloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
1,1,2-Trichloroethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Trichloroethene (TCE)	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Trichlorofluoromethane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Vinyl chloride	ND	0.00104		mg/Kg	1	10/18/2012 5:56:28 PM
Surr: 1,2-Dichloroethane-d4	86.1	70-130		%REC	1	10/18/2012 5:56:28 PM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	1	10/18/2012 5:56:28 PM
Surr: Dibromofluoromethane	93.5	70-130		%REC	1	10/18/2012 5:56:28 PM
Surr: Toluene-d8	97.5	70-130		%REC	1	10/18/2012 5:56:28 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 12:09:39 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/19/2012 12:09:39 PM
Surr: DNOP	95.2	77.6-140		%REC	1	10/19/2012 12:09:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 3:54:32 AM
Surr: BFB	89.3	84-116		%REC	1	10/25/2012 3:54:32 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:53:47 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Barium	290	2.0		mg/Kg	20	10/25/2012 6:03:57 PM
Beryllium	0.89	0.30		mg/Kg	2	10/25/2012 6:01:03 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:01:03 PM
Chromium	11	0.60		mg/Kg	2	10/25/2012 6:01:03 PM
Cobalt	4.5	0.60		mg/Kg	2	10/25/2012 6:01:03 PM
Iron	17000	500		mg/Kg	500	10/31/2012 1:51:45 PM
Lead	2.3	0.50		mg/Kg	2	10/25/2012 6:01:03 PM
Manganese	470	2.0		mg/Kg	20	10/25/2012 6:03:57 PM
Nickel	8.4	1.0		mg/Kg	2	10/25/2012 6:01:03 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:47:07 PM
Vanadium	22	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
Zinc	18	5.0		mg/Kg	2	10/25/2012 6:01:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Aniline	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Anthracene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Azobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Carbazole	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/23/2012 11:01:44 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Chrysene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/23/2012 11:01:44 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/23/2012 11:01:44 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Fluorene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Isophorone	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Naphthalene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/23/2012 11:01:44 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:01:44 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Phenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Pyrene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Pyridine	ND	0.50		mg/Kg	1	10/23/2012 11:01:44 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/23/2012 11:01:44 PM
Surr: 2,4,6-Tribromophenol	76.9	21.3-145		%REC	1	10/23/2012 11:01:44 PM
Surr: 2-Fluorobiphenyl	81.8	20-131		%REC	1	10/23/2012 11:01:44 PM
Surr: 2-Fluorophenol	74.0	11.9-130		%REC	1	10/23/2012 11:01:44 PM
Surr: 4-Terphenyl-d14	72.7	25.1-149		%REC	1	10/23/2012 11:01:44 PM
Surr: Nitrobenzene-d5	87.9	25.6-137		%REC	1	10/23/2012 11:01:44 PM
Surr: Phenol-d5	78.0	20.3-132		%REC	1	10/23/2012 11:01:44 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00178	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Toluene	0.00111	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Ethylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Xylenes, Total	ND	0.00195		mg/Kg	1	10/18/2012 6:27:13 PM
Methyl tert-butyl ether (MTBE)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2,4-Trimethylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,3,5-Trimethylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dichloroethane (EDC)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dibromoethane (EDB)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Naphthalene	ND	0.00195		mg/Kg	1	10/18/2012 6:27:13 PM
1-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/18/2012 6:27:13 PM
2-Methylnaphthalene	ND	0.00390		mg/Kg	1	10/18/2012 6:27:13 PM
Acetone	0.0316	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromodichloromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromoform	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Bromomethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2-Butanone	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
Carbon tetrachloride	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Chlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Chloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Chloromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2-Chlorotoluene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Carbon disulfide	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
4-Chlorotoluene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
cis-1,2-DCE	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
cis-1,3-Dichloropropene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dibromo-3-chloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Dibromochloromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Dibromomethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,3-Dichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,4-Dichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Dichlorodifluoromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1-Dichloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1-Dichloroethene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2-Dichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,3-Dichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2,2-Dichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1-Dichloropropene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Hexachlorobutadiene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Isopropylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
4-Isopropyltoluene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Methylene chloride	ND	0.00292		mg/Kg	1	10/18/2012 6:27:13 PM
n-Butylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
2-Hexanone	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
n-Propylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
sec-Butylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Styrene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
4-Methyl-2-pentanone	ND	0.00974		mg/Kg	1	10/18/2012 6:27:13 PM
tert-Butylbenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,1,2-Tetrachloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,2,2-Tetrachloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Tetrachloroethene (PCE)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
trans-1,2-DCE	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
trans-1,3-Dichloropropene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2,3-Trichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,2,4-Trichlorobenzene	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,1-Trichloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
1,1,2-Trichloroethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Trichloroethene (TCE)	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Trichlorofluoromethane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-21 (0-0.5') DUP

Project: SWMU NO.1

Collection Date: 10/16/2012 11:05:00 AM

Lab ID: 1210858-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Vinyl chloride	ND	0.000974		mg/Kg	1	10/18/2012 6:27:13 PM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	10/18/2012 6:27:13 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1	10/18/2012 6:27:13 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	10/18/2012 6:27:13 PM
Surr: Toluene-d8	88.5	70-130		%REC	1	10/18/2012 6:27:13 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:35:00 AM

Lab ID: 1210858-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 5:25:09 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/21/2012 5:25:09 AM
Surr: DNOP	108	77.6-140		%REC	1	10/21/2012 5:25:09 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 4:23:17 AM
Surr: BFB	91.8	84-116		%REC	1	10/25/2012 4:23:17 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.034	0.033		mg/kg	1	10/23/2012 6:55:35 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Barium	590	2.0		mg/Kg	20	10/25/2012 6:17:18 PM
Beryllium	0.89	0.30		mg/Kg	2	10/25/2012 6:14:12 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:14:12 PM
Chromium	14	0.60		mg/Kg	2	10/25/2012 6:14:12 PM
Cobalt	5.3	0.60		mg/Kg	2	10/25/2012 6:14:12 PM
Iron	22000	500		mg/Kg	500	10/31/2012 1:57:31 PM
Lead	3.5	0.50		mg/Kg	2	10/25/2012 6:14:12 PM
Manganese	530	2.0		mg/Kg	20	10/25/2012 6:17:18 PM
Nickel	8.6	1.0		mg/Kg	2	10/25/2012 6:14:12 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 1:54:36 PM
Vanadium	27	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
Zinc	26	5.0		mg/Kg	2	10/25/2012 6:14:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Aniline	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Anthracene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Azobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:35:00 AM

Lab ID: 1210858-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Carbazole	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/23/2012 11:31:08 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Chrysene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/23/2012 11:31:08 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/23/2012 11:31:08 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Fluorene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Isophorone	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Naphthalene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:35:00 AM

Lab ID: 1210858-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/23/2012 11:31:08 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/23/2012 11:31:08 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Phenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Pyrene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Pyridine	ND	1.0		mg/Kg	1	10/23/2012 11:31:08 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/23/2012 11:31:08 PM
Surr: 2,4,6-Tribromophenol	51.1	21.3-145		%REC	1	10/23/2012 11:31:08 PM
Surr: 2-Fluorobiphenyl	55.1	20-131		%REC	1	10/23/2012 11:31:08 PM
Surr: 2-Fluorophenol	49.3	11.9-130		%REC	1	10/23/2012 11:31:08 PM
Surr: 4-Terphenyl-d14	55.2	25.1-149		%REC	1	10/23/2012 11:31:08 PM
Surr: Nitrobenzene-d5	56.6	25.6-137		%REC	1	10/23/2012 11:31:08 PM
Surr: Phenol-d5	53.3	20.3-132		%REC	1	10/23/2012 11:31:08 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00183	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Toluene	0.00156	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Ethylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Xylenes, Total	ND	0.00189		mg/Kg	1	10/18/2012 6:58:06 PM
Methyl tert-butyl ether (MTBE)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2,4-Trimethylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,3,5-Trimethylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dichloroethane (EDC)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dibromoethane (EDB)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Naphthalene	ND	0.00189		mg/Kg	1	10/18/2012 6:58:06 PM
1-Methylnaphthalene	ND	0.00377		mg/Kg	1	10/18/2012 6:58:06 PM
2-Methylnaphthalene	ND	0.00377		mg/Kg	1	10/18/2012 6:58:06 PM
Acetone	0.0637	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromodichloromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromoform	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Bromomethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2-Butanone	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
Carbon tetrachloride	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Chlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Chloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:35:00 AM

Lab ID: 1210858-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Chloromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2-Chlorotoluene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Carbon disulfide	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
4-Chlorotoluene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
cis-1,2-DCE	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
cis-1,3-Dichloropropene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dibromo-3-chloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Dibromochloromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Dibromomethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,3-Dichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,4-Dichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Dichlorodifluoromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1-Dichloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1-Dichloroethene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2-Dichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,3-Dichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2,2-Dichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1-Dichloropropene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Hexachlorobutadiene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Isopropylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
4-Isopropyltoluene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Methylene chloride	ND	0.00283		mg/Kg	1	10/18/2012 6:58:06 PM
n-Butylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
2-Hexanone	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
n-Propylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
sec-Butylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Styrene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
4-Methyl-2-pentanone	ND	0.00943		mg/Kg	1	10/18/2012 6:58:06 PM
tert-Butylbenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,1,2-Tetrachloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,2,2-Tetrachloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Tetrachloroethene (PCE)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
trans-1,2-DCE	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
trans-1,3-Dichloropropene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2,3-Trichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,2,4-Trichlorobenzene	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,1-Trichloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
1,1,2-Trichloroethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Trichloroethene (TCE)	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Trichlorofluoromethane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:35:00 AM

Lab ID: 1210858-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Vinyl chloride	ND	0.000943		mg/Kg	1	10/18/2012 6:58:06 PM
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%REC	1	10/18/2012 6:58:06 PM
Surr: 4-Bromofluorobenzene	111	70-130		%REC	1	10/18/2012 6:58:06 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	10/18/2012 6:58:06 PM
Surr: Toluene-d8	92.2	70-130		%REC	1	10/18/2012 6:58:06 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:45:00 AM

Lab ID: 1210858-007

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/19/2012 12:34:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2012 12:34:28 PM
Surr: DNOP	95.5	77.6-140		%REC	1	10/19/2012 12:34:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/25/2012 4:51:59 AM
Surr: BFB	88.6	84-116		%REC	1	10/25/2012 4:51:59 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 6:57:23 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Barium	500	2.0		mg/Kg	20	10/25/2012 6:28:40 PM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 6:25:49 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:25:49 PM
Chromium	9.8	0.60		mg/Kg	2	10/25/2012 6:25:49 PM
Cobalt	3.8	0.60		mg/Kg	2	10/25/2012 6:25:49 PM
Iron	14000	500		mg/Kg	500	10/31/2012 2:03:13 PM
Lead	2.4	0.50		mg/Kg	2	10/25/2012 6:25:49 PM
Manganese	330	2.0		mg/Kg	20	10/25/2012 6:28:40 PM
Nickel	6.9	1.0		mg/Kg	2	10/25/2012 6:25:49 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:00:20 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
Zinc	15	5.0		mg/Kg	2	10/25/2012 6:25:49 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:45:00 AM

Lab ID: 1210858-007

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 12:00:35 AM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 12:00:35 AM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 12:00:35 AM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:45:00 AM

Lab ID: 1210858-007

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 12:00:35 AM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 12:00:35 AM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 12:00:35 AM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 12:00:35 AM
Surr: 2,4,6-Tribromophenol	64.0	21.3-145		%REC	1	10/24/2012 12:00:35 AM
Surr: 2-Fluorobiphenyl	60.0	20-131		%REC	1	10/24/2012 12:00:35 AM
Surr: 2-Fluorophenol	53.3	11.9-130		%REC	1	10/24/2012 12:00:35 AM
Surr: 4-Terphenyl-d14	60.2	25.1-149		%REC	1	10/24/2012 12:00:35 AM
Surr: Nitrobenzene-d5	62.0	25.6-137		%REC	1	10/24/2012 12:00:35 AM
Surr: Phenol-d5	58.3	20.3-132		%REC	1	10/24/2012 12:00:35 AM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00192	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Toluene	0.00129	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Ethylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Xylenes, Total	ND	0.00176		mg/Kg	1	10/18/2012 7:28:54 PM
Methyl tert-butyl ether (MTBE)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2,4-Trimethylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,3,5-Trimethylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dichloroethane (EDC)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dibromoethane (EDB)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Naphthalene	ND	0.00176		mg/Kg	1	10/18/2012 7:28:54 PM
1-Methylnaphthalene	ND	0.00351		mg/Kg	1	10/18/2012 7:28:54 PM
2-Methylnaphthalene	ND	0.00351		mg/Kg	1	10/18/2012 7:28:54 PM
Acetone	0.0242	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromodichloromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromoform	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Bromomethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2-Butanone	ND	0.00878		mg/Kg	1	10/18/2012 7:28:54 PM
Carbon tetrachloride	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Chlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Chloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:45:00 AM

Lab ID: 1210858-007

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Chloromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2-Chlorotoluene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Carbon disulfide	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
4-Chlorotoluene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
cis-1,2-DCE	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
cis-1,3-Dichloropropene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dibromo-3-chloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Dibromochloromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Dibromomethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,3-Dichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,4-Dichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Dichlorodifluoromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1-Dichloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1-Dichloroethene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2-Dichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,3-Dichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2,2-Dichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1-Dichloropropene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Hexachlorobutadiene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Isopropylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
4-Isopropyltoluene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Methylene chloride	ND	0.00264		mg/Kg	1	10/18/2012 7:28:54 PM
n-Butylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
2-Hexanone	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
n-Propylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
sec-Butylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Styrene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
4-Methyl-2-pentanone	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
tert-Butylbenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,1,2-Tetrachloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,2,2-Tetrachloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Tetrachloroethene (PCE)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
trans-1,2-DCE	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
trans-1,3-Dichloropropene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2,3-Trichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,2,4-Trichlorobenzene	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,1-Trichloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
1,1,2-Trichloroethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Trichloroethene (TCE)	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Trichlorofluoromethane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-22 (1.5-2')

Project: SWMU NO.1

Collection Date: 10/16/2012 11:45:00 AM

Lab ID: 1210858-007

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Vinyl chloride	ND	0.000878		mg/Kg	1	10/18/2012 7:28:54 PM
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	10/18/2012 7:28:54 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	1	10/18/2012 7:28:54 PM
Surr: Dibromofluoromethane	94.2	70-130		%REC	1	10/18/2012 7:28:54 PM
Surr: Toluene-d8	92.7	70-130		%REC	1	10/18/2012 7:28:54 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210858-008

Matrix: MEOH (SOIL)

Received Date: 10/18/2012 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	10/26/2012 2:33:06 AM
Surr: BFB	98.8	84-116		%REC	1	10/26/2012 2:33:06 AM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Toluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Naphthalene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 7:30:31 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 7:30:31 PM
Acetone	ND	0.75		mg/Kg	1	10/24/2012 7:30:31 PM
Bromobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Bromodichloromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Bromoform	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Bromomethane	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
2-Butanone	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Carbon disulfide	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Carbon tetrachloride	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Chlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Chloroethane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Chloroform	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Chloromethane	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
2-Chlorotoluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
4-Chlorotoluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
cis-1,2-DCE	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Dibromochloromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Dibromomethane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1-Dichloroethane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,1-Dichloroethene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2-Dichloropropane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,3-Dichloropropane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 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 1210858

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MeOH Blank

Project: SWMU NO.1

Collection Date:

Lab ID: 1210858-008

Matrix: MEOH (SOIL)

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: RAA
2,2-Dichloropropane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,1-Dichloropropene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Hexachlorobutadiene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
2-Hexanone	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Isopropylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
4-Isopropyltoluene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	10/24/2012 7:30:31 PM
Methylene chloride	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	10/24/2012 7:30:31 PM
n-Propylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
sec-Butylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Styrene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
tert-Butylbenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
trans-1,2-DCE	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Trichlorofluoromethane	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Vinyl chloride	ND	0.050		mg/Kg	1	10/24/2012 7:30:31 PM
Xylenes, Total	ND	0.10		mg/Kg	1	10/24/2012 7:30:31 PM
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%REC	1	10/24/2012 7:30:31 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	1	10/24/2012 7:30:31 PM
Surr: Dibromofluoromethane	91.8	70-130		%REC	1	10/24/2012 7:30:31 PM
Surr: Toluene-d8	96.2	70-130		%REC	1	10/24/2012 7:30:31 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

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 #: 121019047
Project Name: 1210858

Analytical Results Report

Sample Number	121019047-001	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210858-001D / SWMU 1-18 (0-0.5)	Sampling Time	10:00 AM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.261	10/30/2012	CRW	EPA 335.4	
%moisture	4.7	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019047-002	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210858-002D / SWMU 1-18 (1.5-2)	Sampling Time	10:10 AM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.282	10/30/2012	CRW	EPA 335.4	
%moisture	11.7	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019047-003	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210858-003D / SWMU 1-19 (0-0.5)	Sampling Time	10:35 AM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.26	10/30/2012	CRW	EPA 335.4	
%moisture	4.2	Percent		10/30/2012	TGT	%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

Monday, November 05, 2012

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 #: 121019047
Project Name: 1210858

Analytical Results Report

Sample Number	121019047-004	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210858-004D / SWMU 1-21 (0-0.5)	Sampling Time	11:05 AM		
Matrix	Soil				
Comments					
		</			

Sample Number	121019047-005	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210858-005D / SWMU 1-21 (0-0.5) DUP	Sampling Time	11:05 AM		
Matrix	Soil				
Comments					

Sample Number	121019047-006	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM		
Client Sample ID	1210858-006D / SWMU 1-22 (0-0.5)	Sampling Time	11:35 AM				
Matrix	Soil						
Comments							
Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.262	10/30/2012	CRW	EPA 335.4	
%moisture	4.9	Percent		10/30/2012	TGT	%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

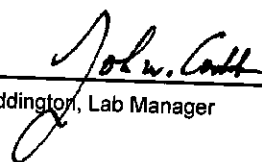
Batch #: 121019047
Project Name: 1210858

Analytical Results Report

Sample Number	121019047-007	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210858-007D / SWMU 1-22 (1.5-2)	Sampling Time	11:45 AM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.273	10/30/2012	CRW	EPA 335.4	
%moisture	10	Percent		10/30/2012	TGT	%moisture	

Authorized Signature


John Coddington, Lab Manager

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

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

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; CO:ID00013; FL(NELAP):E87883; 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

Monday, November 05, 2012

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4397	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4397			RunNo: 6325					
Prep Date:	10/18/2012	Analysis Date: 10/18/2012			SeqNo: 182283		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	77.6	140			

Sample ID	LCS-4397		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4397		RunNo: 6325					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182284		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	111	52.6	130			
Surr: DNOP	4.3		5.000		86.9	77.6	140			

Sample ID	MB-4404		SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182984		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.6	77.6	140			

Sample ID	LCS-4404		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182985		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID	1210819-001AMS		SampType: MS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183001		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	1210819-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183002		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
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- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-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: R6457		RunNo: 6457							
Prep Date:	Analysis Date: 10/24/2012		SeqNo: 186219		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	920		1000		91.7	84	116			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range							
Client ID: LCSS	Batch ID: R6457		RunNo: 6457							
Prep Date:	Analysis Date: 10/24/2012		SeqNo: 186225		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.5	74	117			
Surr: BFB	930		1000		93.1	84	116			

Sample ID 1210811-011BMSD	SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range							
Client ID: BatchQC	Batch ID: R6457		RunNo: 6457							
Prep Date:	Analysis Date: 10/24/2012		SeqNo: 186249		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	5.0	15.90	0	110	70	130	12.7	22.1	
Surr: BFB	590		636.0		93.2	84	116	0	0	

Sample ID MB-4474	SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range							
Client ID: PBS	Batch ID: 4474		RunNo: 6487							
Prep Date: 10/23/2012	Analysis Date: 10/25/2012		SeqNo: 187625		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	950		1000		95.0	84	116			

Sample ID LCS-4474	SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range							
Client ID: LCSS	Batch ID: 4474		RunNo: 6487							
Prep Date: 10/23/2012	Analysis Date: 10/25/2012		SeqNo: 187626		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		100	84	116			

Sample ID 1210A08-001AMS	SampType: MS		TestCode: EPA Method 8015B: Gasoline Range							
Client ID: BatchQC	Batch ID: 4474		RunNo: 6487							
Prep Date: 10/23/2012	Analysis Date: 10/25/2012		SeqNo: 187638		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.34	11.22	90.8	70	130			
Surr: BFB	1100		973.7		117	84	116			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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210A08-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	4474	RunNo:	6487					
Prep Date:	10/23/2012	Analysis Date:	10/25/2012	SeqNo:	187639	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.39	11.22	89.9	70	130	0.479	22.1	
Surr: BFB	1100		975.6		115	84	116	0	0	

Sample ID	1210811-011BMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	R6457	RunNo:	6487					
Prep Date:		Analysis Date:	10/25/2012	SeqNo:	187647	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.91	0	96.6	70	130			
Surr: BFB	650		636.4		102	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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4362		SampType: MBLK		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBS		Batch ID: 4362		RunNo: 6485					
Prep Date:	10/17/2012		Analysis Date: 10/24/2012		SeqNo: 186696		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.5	70	130			
Surr: Toluene-d8	0.49		0.5000		98.5	70	130			

Sample ID	lcs-4362		SampType: LCS		TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSS		Batch ID: 4362		RunNo: 6485					
Prep Date:	10/17/2012		Analysis Date: 10/24/2012		SeqNo: 186792		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.4	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.7	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.1	70	130			
Surr: Toluene-d8	0.47		0.5000		94.6	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182928		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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182928		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	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Sample ID	lcs-4393		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182930		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4393		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4393		RunNo: 6360					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182930		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	70	130			

Sample ID	mb-4419		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 4419		RunNo: 6365					
Prep Date:	10/19/2012		Analysis Date: 10/19/2012		SeqNo: 183060		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.00100								
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100								
Xylenes, Total	ND	0.00200								
Methyl tert-butyl ether (MTBE)	ND	0.00100								
1,2,4-Trimethylbenzene	ND	0.00100								
1,3,5-Trimethylbenzene	ND	0.00100								
1,2-Dichloroethane (EDC)	ND	0.00100								
1,2-Dibromoethane (EDB)	ND	0.00100								
Naphthalene	ND	0.00200								
1-Methylnaphthalene	ND	0.00400								
2-Methylnaphthalene	ND	0.00400								
Acetone	ND	0.0100								
Bromobenzene	ND	0.00100								
Bromodichloromethane	ND	0.00100								
Bromoform	ND	0.00100								
Bromomethane	ND	0.00100								
2-Butanone	ND	0.0100								
Carbon tetrachloride	ND	0.00100								
Chlorobenzene	ND	0.00100								
Chloroethane	ND	0.00100								
Chloroform	ND	0.00100								
Chloromethane	ND	0.00100								
2-Chlorotoluene	ND	0.00100								
Carbon disulfide	ND	0.0100								
4-Chlorotoluene	ND	0.00100								
cis-1,2-DCE	ND	0.00100								
cis-1,3-Dichloropropene	ND	0.00100								
1,2-Dibromo-3-chloropropane	ND	0.00100								
Dibromochloromethane	ND	0.00100								
Dibromomethane	ND	0.00100								
1,2-Dichlorobenzene	ND	0.00100								
1,3-Dichlorobenzene	ND	0.00100								

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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4419		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4419			RunNo: 6365				
Prep Date:	10/19/2012		Analysis Date: 10/19/2012			SeqNo: 183060		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	0.00320	0.00300								
n-Butylbenzene	ND	0.00100								
2-Hexanone	ND	0.0100								
n-Propylbenzene	ND	0.00100								
sec-Butylbenzene	ND	0.00100								
Styrene	ND	0.00100								
4-Methyl-2-pentanone	ND	0.0100								
tert-Butylbenzene	ND	0.00100								
1,1,1,2-Tetrachloroethane	ND	0.00100								
1,1,2,2-Tetrachloroethane	ND	0.00100								
Tetrachloroethene (PCE)	ND	0.00100								
trans-1,2-DCE	ND	0.00100								
trans-1,3-Dichloropropene	ND	0.00100								
1,2,3-Trichlorobenzene	ND	0.00100								
1,2,4-Trichlorobenzene	ND	0.00100								
1,1,1-Trichloroethane	ND	0.00100								
1,1,2-Trichloroethane	ND	0.00100								
Trichloroethene (TCE)	ND	0.00100								
Trichlorofluoromethane	ND	0.00100								
1,2,3-Trichloropropane	ND	0.00100								
Vinyl chloride	ND	0.00100								
Surr: 1,2-Dichloroethane-d4	43.7		50.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	43.0		50.00		85.9	70	130			
Surr: Dibromofluoromethane	50.0		50.00		100	70	130			
Surr: Toluene-d8	51.0		50.00		102	70	130			

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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4419		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 4419			RunNo: 6365				
Prep Date:	10/19/2012		Analysis Date: 10/19/2012			SeqNo: 183062		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	11.7	1.00	12.50	0	93.9	60	140			
Toluene	10.2	1.00	12.50	0	82.0	60	140			
Chlorobenzene	11.9	1.00	12.50	0	94.9	60	140			
1,1-Dichloroethene	14.5	1.00	12.50	0	116	60	140			
Trichloroethene (TCE)	9.39	1.00	12.50	0	75.1	60	140			
Surr: 1,2-Dichloroethane-d4	47.4		50.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	41.6		50.00		83.2	70	130			
Surr: Dibromofluoromethane	46.8		50.00		93.6	70	130			
Surr: Toluene-d8	46.1		50.00		92.3	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4422		SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185414		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Sample ID	mb-4422		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185416		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

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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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4422		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 4422		RunNo: 6445					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185416		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4422		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185416	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID	1210858-004Cms		SampType: MS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	SWMU 1-21 (0-0.5')		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185433	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210858-004Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	SWMU 1-21 (0-0.5')	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185434	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4426		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185363		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-4426		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185364		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	1210859-002CMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185391		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Sample ID	1210859-002CMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 4426		RunNo: 6443					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185392		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	20	

Qualifiers:

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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#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4441	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186822	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4441	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186823	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	23	2.5	25.00	0	92.2	80	120			
Arsenic	23	2.5	25.00	0	93.7	80	120			
Barium	23	0.10	25.00	0	92.2	80	120			
Beryllium	24	0.15	25.00	0	95.1	80	120			
Cadmium	23	0.10	25.00	0	92.8	80	120			
Chromium	23	0.30	25.00	0	91.8	80	120			
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	23	1.0	25.00	0	93.7	80	120			
Lead	23	0.25	25.00	0	91.3	80	120			
Manganese	23	0.10	25.00	0.04450	90.3	80	120			
Nickel	22	0.50	25.00	0	87.6	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Vanadium	24	2.5	25.00	0	95.4	80	120			
Zinc	23	2.5	25.00	0	90.7	80	120			

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186932	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.2	5.0	24.67	0	20.9	75	125			S
Arsenic	23	5.0	24.67	2.167	85.1	75	125			

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186932	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	21	0.30	24.67	0.6108	83.1	75	125			
Cadmium	19	0.20	24.67	0	78.2	75	125			
Chromium	31	0.60	24.67	9.563	87.0	75	125			
Cobalt	21	0.60	24.67	3.401	71.6	75	125			S
Lead	22	0.50	24.67	4.192	72.5	75	125			S
Nickel	24	1.0	24.67	5.943	73.5	75	125			S
Selenium	11	5.0	24.67	0	43.9	75	125			S
Vanadium	41	5.0	24.67	17.94	92.0	75	125			

Sample ID	1210656-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186933	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.23	0	20.3	75	125	200	20	S
Arsenic	23	5.0	24.23	2.167	87.5	75	125	0.929	20	
Beryllium	21	0.30	24.23	0.6108	85.4	75	125	0.909	20	
Cadmium	20	0.20	24.23	0	82.3	75	125	3.30	20	
Chromium	30	0.60	24.23	9.563	83.1	75	125	4.37	20	
Cobalt	21	0.60	24.23	3.401	72.9	75	125	0.0820	20	S
Lead	21	0.50	24.23	4.192	70.5	75	125	3.76	20	S
Nickel	24	1.0	24.23	5.943	75.3	75	125	0.450	20	
Selenium	13	5.0	24.23	0	54.1	75	125	19.1	20	S
Vanadium	39	5.0	24.23	17.94	88.1	75	125	3.41	20	

Sample ID	MB-4441	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4441	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188994	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID	LCS-4441	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4441	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188995	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.3	0.25	5.000	0	106	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210858

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6598					
Prep Date:	10/22/2012	Analysis Date:	10/31/2012	SeqNo:	190745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.935	0	86.1	75	125			

Sample ID	1210656-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6598					
Prep Date:	10/22/2012	Analysis Date:	10/31/2012	SeqNo:	190746	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.847	0	87.1	75	125	0.553	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4101
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	Western Refining Gallup	Work Order Number:	1210858
Received by/date:	LM 10/18/12		
Logged By:	Michelle Garcia	10/18/2012 8:00:00 AM	Michelle Garcia
Completed By:	Michelle Garcia	10/18/2012 8:56:17 AM	Michelle Garcia
Reviewed By:	[Signature]	10/18/12	

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

18. Additional remarks:

19. Cooler Information

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

Chain-of-Custody Record

Client:	WESTERN REFINING SW, INC.
	GALLUP REFINERY
Mailing Address:	ROUTE 3 BOX 7
	GALLUP, NM 87301
Phone #:	505-722-0217
email or Fax#:	SCOTT CROUCH-RPS

QA/QC Package:

☒ Standard	☐ Level 4 (Full Validation)
Accreditation	
☐ NELAP	☐ Other _____
☒ EDD (Type)	<u>EXCEL</u>

Project Manager:

SCOTT CROUCH - RPS
 Sampler: TRACY PAYNE- RPS
 On loc: ☒ Yes ☐ No
 Sample Temperature: 10

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
6/6/12	1105	SOIL	SWMU 1-21(0-0.5')	2 VIALS	SOBI	1210858
			DUP	2 VIALS	MEOH	
				3 JARS	—	—005
	1135		SWMU 1-22(0-0.5')	2 VIALS	SOBI	—006
				2 VIALS	MEOH	
				3 JARS	—	
	1145		SWMU 1-22 (1.5-2')	2 VIALS	SOBI	—007
				2 VIALS	MEOH	
				3 JARS	—	
	—	MEOH	BLANK	2 VIALS	MEOH	—008
				3 JARS	—	

Date: 1/17/12	Time: 0700	Relinquished by: [Signature]	Received by: [Signature]	Date: 1/18/12	Time: 0800
Date:	Time:	Relinquished by:	Received by:	Date:	Time:

Turn-Around Time:

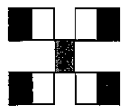
☒ Standard ☐ Rush

Project Name:

Project Name:

SWMU No. 1

Project #:



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

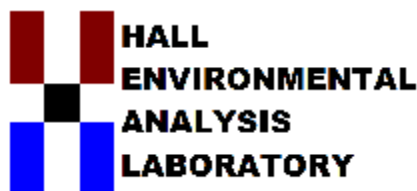
4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks:



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

November 13, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.1

OrderNo.: 1210859

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 6 sample(s) on 10/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-23 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:10:00 PM

Lab ID: 1210859-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 6:39:57 AM
Motor Oil Range Organics (MRO)	ND	52		mg/Kg	1	10/21/2012 6:39:57 AM
Surr: DNOP	105	77.6-140		%REC	1	10/21/2012 6:39:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:01:49 AM
Surr: BFB	98.9	84-116		%REC	1	10/26/2012 3:01:49 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	0.11	0.033		mg/kg	1	10/23/2012 6:59:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Barium	670	2.0		mg/Kg	20	10/25/2012 6:52:13 PM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 6:49:19 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 6:49:19 PM
Chromium	16	0.60		mg/Kg	2	10/25/2012 6:49:19 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 6:49:19 PM
Iron	14000	500		mg/Kg	500	10/31/2012 2:08:56 PM
Lead	3.0	0.50		mg/Kg	2	10/25/2012 6:49:19 PM
Manganese	980	2.0		mg/Kg	20	10/25/2012 6:52:13 PM
Nickel	7.9	1.0		mg/Kg	2	10/25/2012 6:49:19 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:06:02 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
Zinc	21	5.0		mg/Kg	2	10/25/2012 6:49:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Aniline	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Anthracene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Azobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Benzoic acid	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-23 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:10:00 PM

Lab ID: 1210859-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Carbazole	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Chloro-3-methylphenol	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
4-Chloroaniline	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/24/2012 6:26:18 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Chrysene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Di-n-butyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
Di-n-octyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/24/2012 6:26:18 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dichlorophenol	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/24/2012 6:26:18 PM
4,6-Dinitro-2-methylphenol	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dinitrophenol	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
2,4-Dinitrotoluene	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2,6-Dinitrotoluene	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Fluorene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Isophorone	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2-Methylphenol	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Naphthalene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
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- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-23 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:10:00 PM

Lab ID: 1210859-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Nitroaniline	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
Nitrobenzene	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/24/2012 6:26:18 PM
Pentachlorophenol	ND	0.80		mg/Kg	1	10/24/2012 6:26:18 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Phenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Pyrene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Pyridine	ND	1.0		mg/Kg	1	10/24/2012 6:26:18 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:26:18 PM
Surr: 2,4,6-Tribromophenol	95.8	21.3-145		%REC	1	10/24/2012 6:26:18 PM
Surr: 2-Fluorobiphenyl	96.3	20-131		%REC	1	10/24/2012 6:26:18 PM
Surr: 2-Fluorophenol	91.1	11.9-130		%REC	1	10/24/2012 6:26:18 PM
Surr: 4-Terphenyl-d14	92.6	25.1-149		%REC	1	10/24/2012 6:26:18 PM
Surr: Nitrobenzene-d5	105	25.6-137		%REC	1	10/24/2012 6:26:18 PM
Surr: Phenol-d5	85.5	20.3-132		%REC	1	10/24/2012 6:26:18 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00193	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Toluene	0.00211	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Ethylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Xylenes, Total	0.00180	0.00171		mg/Kg	1	10/18/2012 7:59:44 PM
Methyl tert-butyl ether (MTBE)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2,4-Trimethylbenzene	0.00102	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,3,5-Trimethylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dichloroethane (EDC)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dibromoethane (EDB)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Naphthalene	ND	0.00171		mg/Kg	1	10/18/2012 7:59:44 PM
1-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/18/2012 7:59:44 PM
2-Methylnaphthalene	ND	0.00342		mg/Kg	1	10/18/2012 7:59:44 PM
Acetone	0.0502	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromodichloromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromoform	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Bromomethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2-Butanone	0.00903	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
Carbon tetrachloride	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Chlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Chloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-23 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:10:00 PM

Lab ID: 1210859-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Chloromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2-Chlorotoluene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Carbon disulfide	0.0156	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
4-Chlorotoluene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
cis-1,2-DCE	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
cis-1,3-Dichloropropene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dibromo-3-chloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Dibromochloromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Dibromomethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,3-Dichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,4-Dichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Dichlorodifluoromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1-Dichloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1-Dichloroethene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2-Dichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,3-Dichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2,2-Dichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1-Dichloropropene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Hexachlorobutadiene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Isopropylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
4-Isopropyltoluene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Methylene chloride	ND	0.00257		mg/Kg	1	10/18/2012 7:59:44 PM
n-Butylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
2-Hexanone	ND	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
n-Propylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
sec-Butylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Styrene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
4-Methyl-2-pentanone	ND	0.00855		mg/Kg	1	10/18/2012 7:59:44 PM
tert-Butylbenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,1,2-Tetrachloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,2,2-Tetrachloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Tetrachloroethene (PCE)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
trans-1,2-DCE	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
trans-1,3-Dichloropropene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2,3-Trichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,2,4-Trichlorobenzene	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,1-Trichloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
1,1,2-Trichloroethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Trichloroethene (TCE)	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Trichlorofluoromethane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-23 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:10:00 PM

Lab ID: 1210859-001

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Vinyl chloride	ND	0.000855		mg/Kg	1	10/18/2012 7:59:44 PM
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%REC	1	10/18/2012 7:59:44 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	10/18/2012 7:59:44 PM
Surr: Dibromofluoromethane	106	70-130		%REC	1	10/18/2012 7:59:44 PM
Surr: Toluene-d8	84.7	70-130		%REC	1	10/18/2012 7:59:44 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-39 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:35:00 PM

Lab ID: 1210859-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2012 12:20:15 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/19/2012 12:20:15 PM
Surr: DNOP	99.5	77.6-140		%REC	1	10/19/2012 12:20:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:30:32 AM
Surr: BFB	99.7	84-116		%REC	1	10/26/2012 3:30:32 AM
EPA METHOD 7471: MERCURY						Analyst: IDC
Mercury	ND	0.033		mg/kg	1	10/23/2012 7:00:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Barium	450	2.0		mg/Kg	20	10/25/2012 7:03:53 PM
Beryllium	0.71	0.30		mg/Kg	2	10/25/2012 7:00:48 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:00:48 PM
Chromium	10	0.60		mg/Kg	2	10/25/2012 7:00:48 PM
Cobalt	3.9	0.60		mg/Kg	2	10/25/2012 7:00:48 PM
Iron	18000	500		mg/Kg	500	10/31/2012 2:26:50 PM
Lead	4.6	0.50		mg/Kg	2	10/25/2012 7:00:48 PM
Manganese	580	2.0		mg/Kg	20	10/25/2012 7:03:53 PM
Nickel	6.2	1.0		mg/Kg	2	10/25/2012 7:00:48 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:11:46 PM
Vanadium	25	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
Zinc	16	5.0		mg/Kg	2	10/25/2012 7:00:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Acenaphthylene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Aniline	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Anthracene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Azobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Benzoic acid	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM

Qualifiers:

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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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-39 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:35:00 PM

Lab ID: 1210859-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Carbazole	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	10/24/2012 6:56:31 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Chrysene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
Di-n-octyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Dibenzofuran	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	10/24/2012 6:56:31 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	10/24/2012 6:56:31 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
Fluoranthene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Fluorene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Hexachloroethane	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Isophorone	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2-Methylphenol	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Naphthalene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-39 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:35:00 PM

Lab ID: 1210859-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
Nitrobenzene	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	10/24/2012 6:56:31 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	10/24/2012 6:56:31 PM
Phenanthrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Phenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Pyrene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Pyridine	ND	0.50		mg/Kg	1	10/24/2012 6:56:31 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	10/24/2012 6:56:31 PM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/24/2012 6:56:31 PM
Surr: 2-Fluorobiphenyl	83.8	20-131		%REC	1	10/24/2012 6:56:31 PM
Surr: 2-Fluorophenol	72.6	11.9-130		%REC	1	10/24/2012 6:56:31 PM
Surr: 4-Terphenyl-d14	79.1	25.1-149		%REC	1	10/24/2012 6:56:31 PM
Surr: Nitrobenzene-d5	91.4	25.6-137		%REC	1	10/24/2012 6:56:31 PM
Surr: Phenol-d5	75.8	20.3-132		%REC	1	10/24/2012 6:56:31 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00189	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Toluene	0.00109	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Ethylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Xylenes, Total	ND	0.00154		mg/Kg	1	10/18/2012 8:30:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2,4-Trimethylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,3,5-Trimethylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dichloroethane (EDC)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dibromoethane (EDB)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Naphthalene	ND	0.00154		mg/Kg	1	10/18/2012 8:30:32 PM
1-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/18/2012 8:30:32 PM
2-Methylnaphthalene	ND	0.00308		mg/Kg	1	10/18/2012 8:30:32 PM
Acetone	0.0521	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromodichloromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromoform	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Bromomethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2-Butanone	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
Carbon tetrachloride	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Chlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Chloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-39 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:35:00 PM

Lab ID: 1210859-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Chloromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2-Chlorotoluene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Carbon disulfide	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
4-Chlorotoluene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
cis-1,2-DCE	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
cis-1,3-Dichloropropene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dibromo-3-chloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Dibromochloromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Dibromomethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,3-Dichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,4-Dichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Dichlorodifluoromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1-Dichloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1-Dichloroethene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2-Dichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,3-Dichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2,2-Dichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1-Dichloropropene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Hexachlorobutadiene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Isopropylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
4-Isopropyltoluene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Methylene chloride	ND	0.00231		mg/Kg	1	10/18/2012 8:30:32 PM
n-Butylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
2-Hexanone	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
n-Propylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
sec-Butylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Styrene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
4-Methyl-2-pentanone	ND	0.00770		mg/Kg	1	10/18/2012 8:30:32 PM
tert-Butylbenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,1,2-Tetrachloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,2,2-Tetrachloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Tetrachloroethene (PCE)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
trans-1,2-DCE	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
trans-1,3-Dichloropropene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2,3-Trichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,2,4-Trichlorobenzene	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,1-Trichloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
1,1,2-Trichloroethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Trichloroethene (TCE)	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Trichlorofluoromethane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-39 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 12:35:00 PM

Lab ID: 1210859-002

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Vinyl chloride	ND	0.000770		mg/Kg	1	10/18/2012 8:30:32 PM
Surr: 1,2-Dichloroethane-d4	92.3	70-130		%REC	1	10/18/2012 8:30:32 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	10/18/2012 8:30:32 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/18/2012 8:30:32 PM
Surr: Toluene-d8	84.9	70-130		%REC	1	10/18/2012 8:30:32 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:00:00 PM

Lab ID: 1210859-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 4:42:29 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/21/2012 4:42:29 PM
Surr: DNOP	104	77.6-140		%REC	1	10/21/2012 4:42:29 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:59:12 AM
Surr: BFB	98.9	84-116		%REC	1	10/26/2012 3:59:12 AM
EPA METHOD 7471: MERCURY						Analyst: JLF
Mercury	ND	0.033		mg/Kg	1	11/1/2012 3:57:37 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Barium	370	2.0		mg/Kg	20	10/25/2012 7:27:51 PM
Beryllium	0.53	0.30		mg/Kg	2	10/25/2012 7:24:44 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:24:44 PM
Chromium	14	0.60		mg/Kg	2	10/25/2012 7:24:44 PM
Cobalt	3.2	0.60		mg/Kg	2	10/25/2012 7:24:44 PM
Iron	11000	500		mg/Kg	500	10/25/2012 7:30:37 PM
Lead	5.6	0.50		mg/Kg	2	10/25/2012 7:24:44 PM
Manganese	310	2.0		mg/Kg	20	10/25/2012 7:27:51 PM
Nickel	8.6	1.0		mg/Kg	2	10/25/2012 7:24:44 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Silver	ND	0.25		mg/Kg	1	10/31/2012 2:29:39 PM
Vanadium	21	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
Zinc	27	5.0		mg/Kg	2	10/25/2012 7:24:44 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Acenaphthylene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Aniline	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Anthracene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Azobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:00:00 PM

Lab ID: 1210859-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Carbazole	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	10/24/2012 7:26:43 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Chrysene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Dibenzofuran	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	10/24/2012 7:26:43 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/24/2012 7:26:43 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
Fluoranthene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Fluorene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Hexachloroethane	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Isophorone	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Naphthalene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:00:00 PM

Lab ID: 1210859-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	10/24/2012 7:26:43 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:26:43 PM
Phenanthrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Phenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Pyrene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Pyridine	ND	2.5		mg/Kg	1	10/24/2012 7:26:43 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	10/24/2012 7:26:43 PM
Surr: 2,4,6-Tribromophenol	79.2	21.3-145		%REC	1	10/24/2012 7:26:43 PM
Surr: 2-Fluorobiphenyl	91.4	20-131		%REC	1	10/24/2012 7:26:43 PM
Surr: 2-Fluorophenol	93.5	11.9-130		%REC	1	10/24/2012 7:26:43 PM
Surr: 4-Terphenyl-d14	103	25.1-149		%REC	1	10/24/2012 7:26:43 PM
Surr: Nitrobenzene-d5	98.3	25.6-137		%REC	1	10/24/2012 7:26:43 PM
Surr: Phenol-d5	87.3	20.3-132		%REC	1	10/24/2012 7:26:43 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Toluene	0.00202	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Ethylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Xylenes, Total	0.00162	0.00159		mg/Kg	1	10/18/2012 9:01:18 PM
Methyl tert-butyl ether (MTBE)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2,4-Trimethylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,3,5-Trimethylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dichloroethane (EDC)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dibromoethane (EDB)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Naphthalene	ND	0.00159		mg/Kg	1	10/18/2012 9:01:18 PM
1-Methylnaphthalene	ND	0.00318		mg/Kg	1	10/18/2012 9:01:18 PM
2-Methylnaphthalene	ND	0.00318		mg/Kg	1	10/18/2012 9:01:18 PM
Acetone	0.0398	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromodichloromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromoform	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Bromomethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2-Butanone	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
Carbon tetrachloride	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Chlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Chloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:00:00 PM

Lab ID: 1210859-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Chloromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2-Chlorotoluene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Carbon disulfide	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
4-Chlorotoluene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
cis-1,2-DCE	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
cis-1,3-Dichloropropene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dibromo-3-chloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Dibromochloromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Dibromomethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,3-Dichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,4-Dichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Dichlorodifluoromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1-Dichloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1-Dichloroethene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2-Dichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,3-Dichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2,2-Dichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1-Dichloropropene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Hexachlorobutadiene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Isopropylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
4-Isopropyltoluene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Methylene chloride	ND	0.00238		mg/Kg	1	10/18/2012 9:01:18 PM
n-Butylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
2-Hexanone	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
n-Propylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
sec-Butylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Styrene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
4-Methyl-2-pentanone	ND	0.00795		mg/Kg	1	10/18/2012 9:01:18 PM
tert-Butylbenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,1,2-Tetrachloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,2,2-Tetrachloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Tetrachloroethene (PCE)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
trans-1,2-DCE	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
trans-1,3-Dichloropropene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2,3-Trichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,2,4-Trichlorobenzene	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,1-Trichloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
1,1,2-Trichloroethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Trichloroethene (TCE)	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Trichlorofluoromethane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:00:00 PM

Lab ID: 1210859-003

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Vinyl chloride	ND	0.000795		mg/Kg	1	10/18/2012 9:01:18 PM
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%REC	1	10/18/2012 9:01:18 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	10/18/2012 9:01:18 PM
Surr: Dibromofluoromethane	109	70-130		%REC	1	10/18/2012 9:01:18 PM
Surr: Toluene-d8	83.5	70-130		%REC	1	10/18/2012 9:01:18 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:15:00 PM

Lab ID: 1210859-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2012 5:07:51 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2012 5:07:51 PM
Surr: DNOP	106	77.6-140		%REC	1	10/21/2012 5:07:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 4:27:52 AM
Surr: BFB	96.4	84-116		%REC	1	10/26/2012 4:27:52 AM
EPA METHOD 7471: MERCURY						Analyst: JLF
Mercury	0.034	0.033		mg/Kg	1	11/1/2012 4:04:25 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Barium	360	2.0		mg/Kg	20	10/25/2012 7:39:34 PM
Beryllium	0.45	0.30		mg/Kg	2	10/25/2012 7:36:32 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:36:32 PM
Chromium	12	0.60		mg/Kg	2	10/25/2012 7:36:32 PM
Cobalt	4.3	0.60		mg/Kg	2	10/25/2012 7:36:32 PM
Iron	10000	500		mg/Kg	500	10/25/2012 7:42:20 PM
Lead	4.1	0.50		mg/Kg	2	10/25/2012 7:36:32 PM
Manganese	270	2.0		mg/Kg	20	10/25/2012 7:39:34 PM
Nickel	9.8	1.0		mg/Kg	2	10/25/2012 7:36:32 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:32:45 PM
Vanadium	20	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
Zinc	28	5.0		mg/Kg	2	10/25/2012 7:36:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Acenaphthylene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Aniline	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Anthracene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Azobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benz(a)anthracene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(a)pyrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(b)fluoranthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(g,h,i)perylene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzo(k)fluoranthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Benzoic acid	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
Benzyl alcohol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Bis(2-chloroethoxy)methane	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Bis(2-chloroethyl)ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Bis(2-chloroisopropyl)ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:15:00 PM

Lab ID: 1210859-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
4-Bromophenyl phenyl ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Butyl benzyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Carbazole	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	10/24/2012 7:56:49 PM
2-Chlorophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Chlorophenyl phenyl ether	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Chrysene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
Di-n-octyl phthalate	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
Dibenz(a,h)anthracene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Dibenzofuran	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
1,2-Dichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
1,3-Dichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
1,4-Dichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	10/24/2012 7:56:49 PM
Diethyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Dimethyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	10/24/2012 7:56:49 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
Fluoranthene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Fluorene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachlorobutadiene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachlorocyclopentadiene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Hexachloroethane	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Indeno(1,2,3-cd)pyrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Isophorone	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
1-Methylnaphthalene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2-Methylnaphthalene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2-Methylphenol	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
3+4-Methylphenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
N-Nitrosodi-n-propylamine	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
N-Nitrosodiphenylamine	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Naphthalene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2-Nitroaniline	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:15:00 PM

Lab ID: 1210859-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
Nitrobenzene	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
2-Nitrophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	10/24/2012 7:56:49 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	10/24/2012 7:56:49 PM
Phenanthrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Phenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Pyrene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Pyridine	ND	2.5		mg/Kg	1	10/24/2012 7:56:49 PM
1,2,4-Trichlorobenzene	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2,4,5-Trichlorophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
2,4,6-Trichlorophenol	ND	0.99		mg/Kg	1	10/24/2012 7:56:49 PM
Surr: 2,4,6-Tribromophenol	64.9	21.3-145		%REC	1	10/24/2012 7:56:49 PM
Surr: 2-Fluorobiphenyl	87.6	20-131		%REC	1	10/24/2012 7:56:49 PM
Surr: 2-Fluorophenol	87.3	11.9-130		%REC	1	10/24/2012 7:56:49 PM
Surr: 4-Terphenyl-d14	111	25.1-149		%REC	1	10/24/2012 7:56:49 PM
Surr: Nitrobenzene-d5	95.7	25.6-137		%REC	1	10/24/2012 7:56:49 PM
Surr: Phenol-d5	82.8	20.3-132		%REC	1	10/24/2012 7:56:49 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00130	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Toluene	0.00428	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Ethylbenzene	0.00115	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Xylenes, Total	0.00404	0.00212		mg/Kg	1	10/18/2012 9:32:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2,4-Trimethylbenzene	0.00110	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,3,5-Trimethylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dichloroethane (EDC)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dibromoethane (EDB)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Naphthalene	ND	0.00212		mg/Kg	1	10/18/2012 9:32:07 PM
1-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 9:32:07 PM
2-Methylnaphthalene	ND	0.00425		mg/Kg	1	10/18/2012 9:32:07 PM
Acetone	0.0739	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromodichloromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromoform	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Bromomethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2-Butanone	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
Carbon tetrachloride	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Chlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Chloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:15:00 PM

Lab ID: 1210859-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Chloromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Carbon disulfide	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
4-Chlorotoluene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
cis-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
cis-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dibromo-3-chloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Dibromochloromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Dibromomethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,3-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,4-Dichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Dichlorodifluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1-Dichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1-Dichloroethene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,3-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2,2-Dichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Hexachlorobutadiene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Isopropylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
4-Isopropyltoluene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Methylene chloride	ND	0.00319		mg/Kg	1	10/18/2012 9:32:07 PM
n-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
2-Hexanone	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
n-Propylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
sec-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Styrene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
4-Methyl-2-pentanone	ND	0.0106		mg/Kg	1	10/18/2012 9:32:07 PM
tert-Butylbenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,1,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,2,2-Tetrachloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Tetrachloroethene (PCE)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
trans-1,2-DCE	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
trans-1,3-Dichloropropene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2,3-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,2,4-Trichlorobenzene	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,1-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
1,1,2-Trichloroethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Trichloroethene (TCE)	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Trichlorofluoromethane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-25 (0.5-1')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:15:00 PM

Lab ID: 1210859-004

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Vinyl chloride	ND	0.00106		mg/Kg	1	10/18/2012 9:32:07 PM
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%REC	1	10/18/2012 9:32:07 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	1	10/18/2012 9:32:07 PM
Surr: Dibromofluoromethane	105	70-130		%REC	1	10/18/2012 9:32:07 PM
Surr: Toluene-d8	89.6	70-130		%REC	1	10/18/2012 9:32:07 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-26 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:35:00 PM

Lab ID: 1210859-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/21/2012 8:20:05 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2012 8:20:05 AM
Surr: DNOP	104	77.6-140		%REC	1	10/21/2012 8:20:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:05:35 PM
Surr: BFB	98.1	84-116		%REC	1	10/26/2012 3:05:35 PM
EPA METHOD 7471: MERCURY						Analyst: JLF
Mercury	0.051	0.033		mg/Kg	1	11/1/2012 4:06:12 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Barium	390	2.0		mg/Kg	20	10/25/2012 7:50:55 PM
Beryllium	0.62	0.30		mg/Kg	2	10/25/2012 7:48:02 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 7:48:02 PM
Chromium	7.9	0.60		mg/Kg	2	10/25/2012 7:48:02 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 7:48:02 PM
Iron	11000	500		mg/Kg	500	10/25/2012 8:05:04 PM
Lead	2.7	0.50		mg/Kg	2	10/25/2012 7:48:02 PM
Manganese	670	2.0		mg/Kg	20	10/25/2012 7:50:55 PM
Nickel	6.1	1.0		mg/Kg	2	10/25/2012 7:48:02 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:35:55 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
Zinc	16	5.0		mg/Kg	2	10/25/2012 7:48:02 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Acenaphthylene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Aniline	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Anthracene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Azobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benz(a)anthracene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(a)pyrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(b)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(g,h,i)perylene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzo(k)fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Benzoic acid	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
Benzyl alcohol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Bis(2-chloroethoxy)methane	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Bis(2-chloroethyl)ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Bis(2-chloroisopropyl)ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-26 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:35:00 PM

Lab ID: 1210859-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
4-Bromophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Butyl benzyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Carbazole	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Chloro-3-methylphenol	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
4-Chloroaniline	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2-Chloronaphthalene	ND	0.50		mg/Kg	1	10/24/2012 8:26:49 PM
2-Chlorophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Chlorophenyl phenyl ether	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Chrysene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Di-n-butyl phthalate	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
Di-n-octyl phthalate	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
Dibenz(a,h)anthracene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Dibenzofuran	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
1,2-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
1,3-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
1,4-Dichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
3,3'-Dichlorobenzidine	ND	0.50		mg/Kg	1	10/24/2012 8:26:49 PM
Diethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Dimethyl phthalate	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dichlorophenol	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dimethylphenol	ND	0.60		mg/Kg	1	10/24/2012 8:26:49 PM
4,6-Dinitro-2-methylphenol	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dinitrophenol	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
2,4-Dinitrotoluene	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2,6-Dinitrotoluene	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
Fluoranthene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Fluorene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachlorobutadiene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachlorocyclopentadiene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Hexachloroethane	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Indeno(1,2,3-cd)pyrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Isophorone	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
1-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2-Methylnaphthalene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2-Methylphenol	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
3+4-Methylphenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
N-Nitrosodi-n-propylamine	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
N-Nitrosodiphenylamine	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Naphthalene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-26 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:35:00 PM

Lab ID: 1210859-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Nitroaniline	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
Nitrobenzene	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
2-Nitrophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
4-Nitrophenol	ND	0.50		mg/Kg	1	10/24/2012 8:26:49 PM
Pentachlorophenol	ND	0.79		mg/Kg	1	10/24/2012 8:26:49 PM
Phenanthrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Phenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Pyrene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Pyridine	ND	0.99		mg/Kg	1	10/24/2012 8:26:49 PM
1,2,4-Trichlorobenzene	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2,4,5-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
2,4,6-Trichlorophenol	ND	0.40		mg/Kg	1	10/24/2012 8:26:49 PM
Surr: 2,4,6-Tribromophenol	84.7	21.3-145		%REC	1	10/24/2012 8:26:49 PM
Surr: 2-Fluorobiphenyl	79.8	20-131		%REC	1	10/24/2012 8:26:49 PM
Surr: 2-Fluorophenol	85.5	11.9-130		%REC	1	10/24/2012 8:26:49 PM
Surr: 4-Terphenyl-d14	82.6	25.1-149		%REC	1	10/24/2012 8:26:49 PM
Surr: Nitrobenzene-d5	98.8	25.6-137		%REC	1	10/24/2012 8:26:49 PM
Surr: Phenol-d5	80.2	20.3-132		%REC	1	10/24/2012 8:26:49 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00185	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Toluene	0.00369	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Ethylbenzene	0.00121	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Xylenes, Total	0.00503	0.00147		mg/Kg	1	10/18/2012 10:02:52 PM
Methyl tert-butyl ether (MTBE)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2,4-Trimethylbenzene	0.00207	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,3,5-Trimethylbenzene	0.000828	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dichloroethane (EDC)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dibromoethane (EDB)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Naphthalene	ND	0.00147		mg/Kg	1	10/18/2012 10:02:52 PM
1-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/18/2012 10:02:52 PM
2-Methylnaphthalene	ND	0.00293		mg/Kg	1	10/18/2012 10:02:52 PM
Acetone	0.0644	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromodichloromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromoform	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Bromomethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2-Butanone	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
Carbon tetrachloride	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Chlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Chloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-26 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:35:00 PM

Lab ID: 1210859-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Chloromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2-Chlorotoluene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Carbon disulfide	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
4-Chlorotoluene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
cis-1,2-DCE	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
cis-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dibromo-3-chloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Dibromochloromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Dibromomethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,3-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,4-Dichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Dichlorodifluoromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1-Dichloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1-Dichloroethene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,3-Dichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2,2-Dichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1-Dichloropropene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Hexachlorobutadiene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Isopropylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
4-Isopropyltoluene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Methylene chloride	ND	0.00220		mg/Kg	1	10/18/2012 10:02:52 PM
n-Butylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
2-Hexanone	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
n-Propylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
sec-Butylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Styrene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
4-Methyl-2-pentanone	ND	0.00733		mg/Kg	1	10/18/2012 10:02:52 PM
tert-Butylbenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,1,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,2,2-Tetrachloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Tetrachloroethene (PCE)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
trans-1,2-DCE	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
trans-1,3-Dichloropropene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2,3-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,2,4-Trichlorobenzene	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,1-Trichloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
1,1,2-Trichloroethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Trichloroethene (TCE)	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Trichlorofluoromethane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-26 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 1:35:00 PM

Lab ID: 1210859-005

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Vinyl chloride	ND	0.000733		mg/Kg	1	10/18/2012 10:02:52 PM
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%REC	1	10/18/2012 10:02:52 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	10/18/2012 10:02:52 PM
Surr: Dibromofluoromethane	98.1	70-130		%REC	1	10/18/2012 10:02:52 PM
Surr: Toluene-d8	95.4	70-130		%REC	1	10/18/2012 10:02:52 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-29 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 2:40:00 PM

Lab ID: 1210859-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	76	9.6		mg/Kg	1	10/21/2012 9:10:18 AM
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	10/21/2012 9:10:18 AM
Surr: DNOP	112	77.6-140		%REC	1	10/21/2012 9:10:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/26/2012 3:34:21 PM
Surr: BFB	97.4	84-116		%REC	1	10/26/2012 3:34:21 PM
EPA METHOD 7471: MERCURY						Analyst: JLF
Mercury	0.22	0.033		mg/Kg	1	11/1/2012 4:07:57 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Arsenic	ND	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Barium	550	2.0		mg/Kg	20	10/25/2012 8:13:48 PM
Beryllium	0.69	0.30		mg/Kg	2	10/25/2012 8:10:53 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:10:53 PM
Chromium	17	0.60		mg/Kg	2	10/25/2012 8:10:53 PM
Cobalt	5.1	0.60		mg/Kg	2	10/25/2012 8:10:53 PM
Iron	15000	500		mg/Kg	500	10/25/2012 8:16:27 PM
Lead	7.0	0.50		mg/Kg	2	10/25/2012 8:10:53 PM
Manganese	620	2.0		mg/Kg	20	10/25/2012 8:13:48 PM
Nickel	9.3	1.0		mg/Kg	2	10/25/2012 8:10:53 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:38:49 PM
Vanadium	19	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
Zinc	48	5.0		mg/Kg	2	10/25/2012 8:10:53 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Acenaphthylene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Aniline	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Anthracene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Azobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benz(a)anthracene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(a)pyrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(b)fluoranthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(g,h,i)perylene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzo(k)fluoranthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Benzoic acid	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
Benzyl alcohol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Bis(2-chloroethoxy)methane	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Bis(2-chloroethyl)ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Bis(2-chloroisopropyl)ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-29 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 2:40:00 PM

Lab ID: 1210859-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
4-Bromophenyl phenyl ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Butyl benzyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Carbazole	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
4-Chloroaniline	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2-Chloronaphthalene	ND	1.0		mg/Kg	1	10/24/2012 8:56:42 PM
2-Chlorophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Chlorophenyl phenyl ether	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Chrysene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Di-n-butyl phthalate	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
Di-n-octyl phthalate	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
Dibenz(a,h)anthracene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Dibenzofuran	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
1,2-Dichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
1,3-Dichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
1,4-Dichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
3,3'-Dichlorobenzidine	ND	1.0		mg/Kg	1	10/24/2012 8:56:42 PM
Diethyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Dimethyl phthalate	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dichlorophenol	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dimethylphenol	ND	1.2		mg/Kg	1	10/24/2012 8:56:42 PM
4,6-Dinitro-2-methylphenol	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dinitrophenol	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
2,4-Dinitrotoluene	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2,6-Dinitrotoluene	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
Fluoranthene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Fluorene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachlorobutadiene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachlorocyclopentadiene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Hexachloroethane	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Indeno(1,2,3-cd)pyrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Isophorone	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
1-Methylnaphthalene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2-Methylnaphthalene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2-Methylphenol	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
3+4-Methylphenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
N-Nitrosodi-n-propylamine	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
N-Nitrosodiphenylamine	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Naphthalene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2-Nitroaniline	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM

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- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-29 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 2:40:00 PM

Lab ID: 1210859-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Nitroaniline	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
Nitrobenzene	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
2-Nitrophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
4-Nitrophenol	ND	1.0		mg/Kg	1	10/24/2012 8:56:42 PM
Pentachlorophenol	ND	1.6		mg/Kg	1	10/24/2012 8:56:42 PM
Phenanthrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Phenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Pyrene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Pyridine	ND	2.0		mg/Kg	1	10/24/2012 8:56:42 PM
1,2,4-Trichlorobenzene	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2,4,5-Trichlorophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
2,4,6-Trichlorophenol	ND	0.80		mg/Kg	1	10/24/2012 8:56:42 PM
Surr: 2,4,6-Tribromophenol	84.6	21.3-145		%REC	1	10/24/2012 8:56:42 PM
Surr: 2-Fluorobiphenyl	79.2	20-131		%REC	1	10/24/2012 8:56:42 PM
Surr: 2-Fluorophenol	82.8	11.9-130		%REC	1	10/24/2012 8:56:42 PM
Surr: 4-Terphenyl-d14	86.9	25.1-149		%REC	1	10/24/2012 8:56:42 PM
Surr: Nitrobenzene-d5	89.4	25.6-137		%REC	1	10/24/2012 8:56:42 PM
Surr: Phenol-d5	80.3	20.3-132		%REC	1	10/24/2012 8:56:42 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Benzene	0.00236	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Toluene	0.00327	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Ethylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Xylenes, Total	0.00307	0.00164		mg/Kg	1	10/18/2012 10:33:37 PM
Methyl tert-butyl ether (MTBE)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2,4-Trimethylbenzene	0.00116	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,3,5-Trimethylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dichloroethane (EDC)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dibromoethane (EDB)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Naphthalene	ND	0.00164		mg/Kg	1	10/18/2012 10:33:37 PM
1-Methylnaphthalene	ND	0.00327		mg/Kg	1	10/18/2012 10:33:37 PM
2-Methylnaphthalene	ND	0.00327		mg/Kg	1	10/18/2012 10:33:37 PM
Acetone	0.0641	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromodichloromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromoform	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Bromomethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2-Butanone	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
Carbon tetrachloride	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Chlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Chloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM

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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 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-29 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 2:40:00 PM

Lab ID: 1210859-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
Chloroform	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Chloromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2-Chlorotoluene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Carbon disulfide	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
4-Chlorotoluene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
cis-1,2-DCE	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
cis-1,3-Dichloropropene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dibromo-3-chloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Dibromochloromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Dibromomethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,3-Dichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,4-Dichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Dichlorodifluoromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1-Dichloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1-Dichloroethene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2-Dichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,3-Dichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2,2-Dichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1-Dichloropropene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Hexachlorobutadiene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Isopropylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
4-Isopropyltoluene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Methylene chloride	ND	0.00245		mg/Kg	1	10/18/2012 10:33:37 PM
n-Butylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
2-Hexanone	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
n-Propylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
sec-Butylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Styrene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
4-Methyl-2-pentanone	ND	0.00818		mg/Kg	1	10/18/2012 10:33:37 PM
tert-Butylbenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,1,2-Tetrachloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,2,2-Tetrachloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Tetrachloroethene (PCE)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
trans-1,2-DCE	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
trans-1,3-Dichloropropene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2,3-Trichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,2,4-Trichlorobenzene	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,1-Trichloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
1,1,2-Trichloroethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Trichloroethene (TCE)	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Trichlorofluoromethane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210859

Date Reported: 11/13/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 1-29 (0-0.5')

Project: SWMU NO.1

Collection Date: 10/16/2012 2:40:00 PM

Lab ID: 1210859-006

Matrix: SOIL

Received Date: 10/18/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: RAA
1,2,3-Trichloropropane	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Vinyl chloride	ND	0.000818		mg/Kg	1	10/18/2012 10:33:37 PM
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%REC	1	10/18/2012 10:33:37 PM
Surr: 4-Bromofluorobenzene	132	70-130	S	%REC	1	10/18/2012 10:33:37 PM
Surr: Dibromofluoromethane	99.7	70-130		%REC	1	10/18/2012 10:33:37 PM
Surr: Toluene-d8	98.6	70-130		%REC	1	10/18/2012 10:33:37 PM

Qualifiers:

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J Analyte detected below quantitation limits
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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 #: 121019046
Project Name: 1210859

Analytical Results Report

Sample Number	121019046-001	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210859-001D / SWMU 1-23 (0-0.5)	Sampling Time	12:10 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.253	10/30/2012	CRW	EPA 335.4	
%moisture	2.9	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019046-002	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210859-002D / SWMU 1-39 (0-0.5)	Sampling Time	12:35 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.259	10/30/2012	CRW	EPA 335.4	
%moisture	4.1	Percent		10/30/2012	TGT	%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 #: 121019046
Project Name: 1210859

Analytical Results Report

Sample Number 121019046-003 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-003D / SWMU 1-25 (0-0.5) **Sampling Time** 1:00 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.259	10/30/2012	CRW	EPA 335.4	
%moisture	3.9	Percent		10/30/2012	TGT	%moisture	

Sample Number 121019046-004 **Sampling Date** 10/16/2012 **Date/Time Received** 10/19/2012 1:14 PM
Client Sample ID 1210859-004D / SWMU 1-25 (0.5-1) **Sampling Time** 1:15 PM
Matrix Soil
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.268	10/30/2012	CRW	EPA 335.4	
%moisture	7.3	Percent		10/30/2012	TGT	%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 #: 121019046
Project Name: 1210859

Analytical Results Report

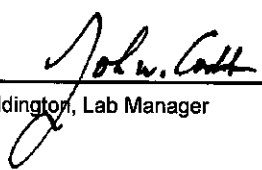
Sample Number	121019046-005	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210859-005D / SWMU 1-26 (0-0.5)	Sampling Time	1:35 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.246	10/30/2012	CRW	EPA 335.4	
%moisture	3.8	Percent		10/30/2012	TGT	%moisture	

Sample Number	121019046-006	Sampling Date	10/16/2012	Date/Time Received	10/19/2012 1:14 PM
Client Sample ID	1210859-006D / SWMU 1-29 (0-0.5)	Sampling Time	2:40 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	6.05	mg/Kg	0.256	10/30/2012	CRW	EPA 335.4	
%moisture	2.8	Percent		10/30/2012	TGT	%moisture	

Authorized Signature


John Coddington, Lab Manager

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

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

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

Monday, November 05, 2012

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4404	SampType: MBLK			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID: 4404			RunNo: 6356					
Prep Date:	10/18/2012	Analysis Date: 10/19/2012			SeqNo: 182984		Units: 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	9.6		10.00		95.6	77.6	140			

Sample ID	LCS-4404		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 182985		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	34	10	50.00	0	67.4	52.6	130			
Surr: DNOP	4.5		5.000		90.3	77.6	140			

Sample ID	1210819-001AMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID: 4404			RunNo: 6356					
Prep Date:	10/18/2012	Analysis Date: 10/19/2012			SeqNo: 183001		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	12	58.99	27.06	67.2	57.2	146			
Surr: DNOP	4.7		5.899		79.7	77.6	140			

Sample ID	1210819-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC		Batch ID: 4404		RunNo: 6356					
Prep Date:	10/18/2012		Analysis Date: 10/19/2012		SeqNo: 183002		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	12	61.48	27.06	68.9	57.2	146	4.05	24.5	
Surr: DNOP	4.9		6.148		79.2	77.6	140	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4474		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4474		RunNo: 6487					
Prep Date:	10/23/2012		Analysis Date: 10/25/2012		SeqNo: 187625		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	950		1000		95.0	84	116			

Sample ID	LCS-4474		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4474		RunNo: 6487					
Prep Date:	10/23/2012		Analysis Date: 10/25/2012		SeqNo: 187626		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	74	117			
Surr: BFB	1000		1000		100	84	116			

Sample ID	1210A08-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4474		RunNo: 6487					
Prep Date:	10/23/2012		Analysis Date: 10/25/2012		SeqNo: 187638		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.34	11.22	90.8	70	130			
Surr: BFB	1100		973.7		117	84	116			S

Sample ID	1210A08-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 4474		RunNo: 6487					
Prep Date:	10/23/2012		Analysis Date: 10/25/2012		SeqNo: 187639		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.39	11.22	89.9	70	130	0.479	22.1	
Surr: BFB	1100		975.6		115	84	116	0	0	

Sample ID	MB-4447		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 4447		RunNo: 6512					
Prep Date:	10/22/2012		Analysis Date: 10/26/2012		SeqNo: 187995		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	84	116			

Sample ID	LCS-4447		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 4447		RunNo: 6512					
Prep Date:	10/22/2012		Analysis Date: 10/26/2012		SeqNo: 187996		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	106	74	117			
Surr: BFB	1000		1000		103	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#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 4393			RunNo: 6360				
Prep Date:	10/18/2012		Analysis Date: 10/18/2012			SeqNo: 182928		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#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4393		SampType:	MBLK		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	PBS		Batch ID:	4393		RunNo:	6360			
Prep Date:	10/18/2012		Analysis Date:	10/18/2012		SeqNo:	182928		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	46.1		50.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	44.8		50.00		89.6	70	130			
Surr: Dibromofluoromethane	53.0		50.00		106	70	130			
Surr: Toluene-d8	42.4		50.00		84.8	70	130			

Sample ID	lcs-4393		SampType:	LCS		TestCode:	Method 8260B/5035LOW: VOLATILES			
Client ID:	LCSS		Batch ID:	4393		RunNo:	6360			
Prep Date:	10/18/2012		Analysis Date:	10/18/2012		SeqNo:	182930		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	8.87	1.00	10.00	0	88.7	60	140			
Toluene	8.50	1.00	10.00	0	85.0	60	140			
Chlorobenzene	9.38	1.00	10.00	0	93.8	60	140			
1,1-Dichloroethene	11.0	1.00	10.00	0	110	60	140			
Trichloroethene (TCE)	7.70	1.00	10.00	0	77.0	60	140			
Surr: 1,2-Dichloroethane-d4	44.9		50.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	40.9		50.00		81.7	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#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	lcs-4393		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 4393		RunNo: 6360					
Prep Date:	10/18/2012		Analysis Date: 10/18/2012		SeqNo: 182930		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	50.4		50.00		101	70	130			
Surr: Toluene-d8	41.1		50.00		82.2	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#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	Ics-4422		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 4422		RunNo: 6445					
Prep Date:	10/19/2012		Analysis Date: 10/23/2012		SeqNo: 185414		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.670	0	74.7	49.7	98.1			
4-Chloro-3-methylphenol	2.6	0.50	3.330	0	76.9	43.8	89.1			
2-Chlorophenol	2.5	0.20	3.330	0	75.3	41.1	96.9			
1,4-Dichlorobenzene	1.3	0.20	1.670	0	78.0	41	97.4			
2,4-Dinitrotoluene	1.3	0.50	1.670	0	79.3	44.4	104			
N-Nitrosodi-n-propylamine	1.4	0.20	1.670	0	83.1	39.1	86.9			
4-Nitrophenol	2.4	0.25	3.330	0	73.5	44.2	107			
Pentachlorophenol	2.1	0.40	3.330	0	61.6	36.2	80			
Phenol	2.4	0.20	3.330	0	72.5	42.7	92.7			
Pyrene	1.3	0.20	1.670	0	77.3	34.7	98.8			
1,2,4-Trichlorobenzene	1.5	0.20	1.670	0	91.6	37.8	98.3			
Surr: 2,4,6-Tribromophenol	3.4		3.330		103	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		95.5	20	131			
Surr: 2-Fluorophenol	2.8		3.330		83.7	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.670		79.6	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.670		99.9	25.6	137			
Surr: Phenol-d5	3.0		3.330		89.0	20.3	132			

Sample ID	mb-4422		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185416		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4422	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185416	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.40								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	mb-4422		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBS		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185416		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.9		3.330		117	21.3	145			
Surr: 2-Fluorobiphenyl	1.6		1.670		98.4	20	131			
Surr: 2-Fluorophenol	3.1		3.330		91.6	11.9	130			
Surr: 4-Terphenyl-d14	1.5		1.670		91.7	25.1	149			
Surr: Nitrobenzene-d5	1.8		1.670		109	25.6	137			
Surr: Phenol-d5	3.2		3.330		96.3	20.3	132			

Sample ID	1210858-004Cms		SampType: MS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	BatchQC		Batch ID: 4422			RunNo: 6445				
Prep Date:	10/19/2012		Analysis Date: 10/23/2012			SeqNo: 185433		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.659	0	69.3	25.6	142			
4-Chloro-3-methylphenol	2.2	0.50	3.309	0	67.6	63.7	100			
2-Chlorophenol	2.0	0.20	3.309	0	61.7	22.2	126			
1,4-Dichlorobenzene	1.1	0.20	1.659	0	63.6	12.4	115			
2,4-Dinitrotoluene	1.2	0.50	1.659	0	74.6	14.9	142			
N-Nitrosodi-n-propylamine	1.1	0.20	1.659	0	65.9	13.9	136			
4-Nitrophenol	2.2	0.25	3.309	0.09121	63.6	36.7	130			
Pentachlorophenol	1.9	0.40	3.309	0	56.5	15.8	113			
Phenol	2.1	0.20	3.309	0	63.9	25.1	124			
Pyrene	1.1	0.20	1.659	0	68.6	35.8	124			
1,2,4-Trichlorobenzene	1.3	0.20	1.659	0	78.0	30	113			
Surr: 2,4,6-Tribromophenol	3.0		3.309		90.3	21.3	145			
Surr: 2-Fluorobiphenyl	1.5		1.659		90.0	20	131			
Surr: 2-Fluorophenol	2.5		3.309		74.2	11.9	130			
Surr: 4-Terphenyl-d14	1.3		1.659		80.0	25.1	149			
Surr: Nitrobenzene-d5	1.7		1.659		101	25.6	137			
Surr: Phenol-d5	2.8		3.309		84.0	20.3	132			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210858-004Cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	BatchQC	Batch ID:	4422	RunNo:	6445					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185434	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	1.2	0.20	1.681	0	71.3	25.6	142	4.05	22	
4-Chloro-3-methylphenol	2.3	0.50	3.351	0	69.5	63.7	100	4.10	27.3	
2-Chlorophenol	2.3	0.20	3.351	0	68.2	22.2	126	11.4	26.3	
1,4-Dichlorobenzene	1.1	0.20	1.681	0	63.4	12.4	115	1.02	27.4	
2,4-Dinitrotoluene	1.3	0.50	1.681	0	77.0	14.9	142	4.43	27.4	
N-Nitrosodi-n-propylamine	1.3	0.20	1.681	0	75.9	13.9	136	15.3	22.6	
4-Nitrophenol	2.3	0.25	3.351	0.09121	64.9	36.7	130	3.21	20	
Pentachlorophenol	2.0	0.40	3.351	0	59.9	15.8	113	7.18	27.1	
Phenol	2.2	0.20	3.351	0	66.5	25.1	124	5.18	32.2	
Pyrene	1.2	0.20	1.681	0	70.8	35.8	124	4.36	29.5	
1,2,4-Trichlorobenzene	1.4	0.20	1.681	0	80.5	30	113	4.34	27.8	
Surr: 2,4,6-Tribromophenol	3.1		3.351		93.6	21.3	145	0	0	
Surr: 2-Fluorobiphenyl	1.5		1.681		91.0	20	131	0	0	
Surr: 2-Fluorophenol	2.5		3.351		75.3	11.9	130	0	0	
Surr: 4-Terphenyl-d14	1.4		1.681		81.4	25.1	149	0	0	
Surr: Nitrobenzene-d5	1.6		1.681		96.9	25.6	137	0	0	
Surr: Phenol-d5	2.9		3.351		85.9	20.3	132	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4426	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	4426	RunNo:	6443					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185363	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-4426	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	4426	RunNo:	6443					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185364	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	1210859-002CMS	SampType:	MS	TestCode:	EPA Method 7471: Mercury					
Client ID:	SWMU 1-39 (0-0.5')	Batch ID:	4426	RunNo:	6443					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185391	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1654	0.01134	102	75	125			

Sample ID	1210859-002CMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	SWMU 1-39 (0-0.5')	Batch ID:	4426	RunNo:	6443					
Prep Date:	10/19/2012	Analysis Date:	10/23/2012	SeqNo:	185392	Units:	mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.18	0.033	0.1685	0.01134	99.0	75	125	1.06	20	

Sample ID	MB-4629	SampType:	MBLK	TestCode:	EPA Method 7471: Mercury					
Client ID:	PBS	Batch ID:	4629	RunNo:	6634					
Prep Date:	11/1/2012	Analysis Date:	11/1/2012	SeqNo:	191517	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-4629	SampType:	LCS	TestCode:	EPA Method 7471: Mercury					
Client ID:	LCSS	Batch ID:	4629	RunNo:	6634					
Prep Date:	11/1/2012	Analysis Date:	11/1/2012	SeqNo:	191518	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	101	80	120			

Sample ID	1210859-003CMS	SampType:	MS	TestCode:	EPA Method 7471: Mercury					
Client ID:	SWMU 1-25 (0-0.5')	Batch ID:	4629	RunNo:	6634					
Prep Date:	11/1/2012	Analysis Date:	11/1/2012	SeqNo:	191520	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.19	0.033	0.1609	0.02890	103	75	125			

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#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210859-003CMSD	SampType:	MSD	TestCode:	EPA Method 7471: Mercury					
Client ID:	SWMU 1-25 (0-0.5')	Batch ID:	4629	RunNo:	6634					
Prep Date:	11/1/2012	Analysis Date:	11/1/2012	SeqNo:	191521	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.22	0.033	0.1651	0.02890	113	75	125	10.5	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	MB-4441	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186822	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	2.5								
Arsenic	ND	2.5								
Barium	ND	0.10								
Beryllium	ND	0.15								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Cobalt	ND	0.30								
Iron	ND	1.0								
Lead	ND	0.25								
Manganese	ND	0.10								
Nickel	ND	0.50								
Selenium	ND	2.5								
Vanadium	ND	2.5								
Zinc	ND	2.5								

Sample ID	LCS-4441	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186823	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	23	2.5	25.00	0	92.2	80	120			
Arsenic	23	2.5	25.00	0	93.7	80	120			
Barium	23	0.10	25.00	0	92.2	80	120			
Beryllium	24	0.15	25.00	0	95.1	80	120			
Cadmium	23	0.10	25.00	0	92.8	80	120			
Chromium	23	0.30	25.00	0	91.8	80	120			
Cobalt	22	0.30	25.00	0	88.9	80	120			
Iron	23	1.0	25.00	0	93.7	80	120			
Lead	23	0.25	25.00	0	91.3	80	120			
Manganese	23	0.10	25.00	0.04450	90.3	80	120			
Nickel	22	0.50	25.00	0	87.6	80	120			
Selenium	22	2.5	25.00	0	87.2	80	120			
Vanadium	24	2.5	25.00	0	95.4	80	120			
Zinc	23	2.5	25.00	0	90.7	80	120			

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186932	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	5.2	5.0	24.67	0	20.9	75	125			S
Arsenic	23	5.0	24.67	2.167	85.1	75	125			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186932	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Beryllium	21	0.30	24.67	0.6108	83.1	75	125			
Cadmium	19	0.20	24.67	0	78.2	75	125			
Chromium	31	0.60	24.67	9.563	87.0	75	125			
Cobalt	21	0.60	24.67	3.401	71.6	75	125			S
Lead	22	0.50	24.67	4.192	72.5	75	125			S
Nickel	24	1.0	24.67	5.943	73.5	75	125			S
Selenium	11	5.0	24.67	0	43.9	75	125			S
Vanadium	41	5.0	24.67	17.94	92.0	75	125			

Sample ID	1210656-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6493					
Prep Date:	10/22/2012	Analysis Date:	10/25/2012	SeqNo:	186933	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony	ND	5.0	24.23	0	20.3	75	125	200	20	S
Arsenic	23	5.0	24.23	2.167	87.5	75	125	0.929	20	
Beryllium	21	0.30	24.23	0.6108	85.4	75	125	0.909	20	
Cadmium	20	0.20	24.23	0	82.3	75	125	3.30	20	
Chromium	30	0.60	24.23	9.563	83.1	75	125	4.37	20	
Cobalt	21	0.60	24.23	3.401	72.9	75	125	0.0820	20	S
Lead	21	0.50	24.23	4.192	70.5	75	125	3.76	20	S
Nickel	24	1.0	24.23	5.943	75.3	75	125	0.450	20	
Selenium	13	5.0	24.23	0	54.1	75	125	19.1	20	S
Vanadium	39	5.0	24.23	17.94	88.1	75	125	3.41	20	

Sample ID	MB-4441	SampType:	MBLK	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID:	4441	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188994	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	ND	0.25								

Sample ID	LCS-4441	SampType:	LCS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	LCSS	Batch ID:	4441	RunNo:	6546					
Prep Date:	10/22/2012	Analysis Date:	10/29/2012	SeqNo:	188995	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	5.3	0.25	5.000	0	106	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1210859

13-Nov-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.1

Sample ID	1210656-001CMS	SampType:	MS	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6598					
Prep Date:	10/22/2012	Analysis Date:	10/31/2012	SeqNo:	190745	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.935	0	86.1	75	125			

Sample ID	1210656-001CMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	4441	RunNo:	6598					
Prep Date:	10/22/2012	Analysis Date:	10/31/2012	SeqNo:	190746	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	4.2	0.50	4.847	0	87.1	75	125	0.553	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1210859

Received by/date: LM 10/18/12

Logged By: Michelle Garcia 10/18/2012 8:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia 10/18/2012 9:07:38 AM

Michelle Garcia

Reviewed By: [Signature] 10/18/12

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

18. Additional remarks:

19. Cooler Information

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

SWMU 14 SOILS
METALS J-FLAGGED RESULTS

Analytical Report

Lab Order: 1207748

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** SWMU 14-1 (0-0.5)**Project:** SWMU NO.14**Collection Date:** 7/16/2012 4:15:00 PM**Lab ID:** 1207748-001C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	2.5	12		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Arsenic	ND	0.77	12		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Barium	790	0.53	2.0		mg/Kg	20	7/25/2012 5:52:08 PM	2958
Beryllium	0.61	0.047	0.75	J	mg/Kg	5	7/26/2012 8:30:20 PM	2958
Cadmium	ND	0.11	0.50		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Chromium	6.8	0.24	1.5		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Cobalt	5.4	0.33	1.5		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Iron	9000	430	500		mg/Kg	500	7/31/2012 6:15:57 PM	2958
Lead	3.6	0.98	1.2		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Manganese	570	6.4	2.0		mg/Kg	20	7/30/2012 7:33:13 PM	2958
Nickel	6.1	0.13	2.5		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Selenium	ND	1.9	12		mg/Kg	5	7/30/2012 7:30:35 PM	2958
Silver	ND	0.068	1.2		mg/Kg	5	7/25/2012 5:36:01 PM	2958
Vanadium	17	0.10	12		mg/Kg	5	7/26/2012 8:30:20 PM	2958
Zinc	21	1.9	12		mg/Kg	5	7/26/2012 8:30:20 PM	2958

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

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

Analytical Report

Lab Order: 1207748

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: SWMU NO.14
Lab ID: 1207748-002C

Client Sample ID: SWMU 14-1 (1.5-2)
Collection Date: 7/16/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	2.5	12		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Arsenic	ND	0.77	12		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Barium	550	0.53	2.0		mg/Kg	20	7/25/2012 5:54:25 PM	2958
Beryllium	0.89	0.047	0.75		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Cadmium	ND	0.11	0.50		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Chromium	11	0.24	1.5		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Cobalt	5.1	0.33	1.5		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Iron	17000	430	500		mg/Kg	500	7/31/2012 6:23:35 PM	2958
Lead	4.6	0.98	1.2		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Manganese	510	6.4	2.0		mg/Kg	20	7/30/2012 7:40:43 PM	2958
Nickel	8.3	0.13	2.5		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Selenium	ND	7.8	50		mg/Kg	20	7/30/2012 7:40:43 PM	2958
Silver	ND	0.068	1.2		mg/Kg	5	7/25/2012 5:42:55 PM	2958
Vanadium	26	0.10	12		mg/Kg	5	7/26/2012 8:33:08 PM	2958
Zinc	21	1.9	12		mg/Kg	5	7/26/2012 8:33:08 PM	2958

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

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

Analytical Report

Lab Order: 1207748

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (10-12)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:30:00 PM

Lab ID: 1207748-003C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	2.5	12		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Arsenic	ND	0.77	12		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Barium	1100	1.3	5.0		mg/Kg	50	7/25/2012 5:56:42 PM	2958
Beryllium	0.69	0.047	0.75	J	mg/Kg	5	7/26/2012 8:35:53 PM	2958
Cadmium	ND	0.11	0.50		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Chromium	11	0.24	1.5		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Cobalt	5.0	0.33	1.5		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Iron	14000	430	500		mg/Kg	500	7/31/2012 6:26:11 PM	2958
Lead	2.5	0.98	1.2		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Manganese	590	6.4	2.0		mg/Kg	20	7/30/2012 7:56:33 PM	2958
Nickel	7.6	0.13	2.5		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Selenium	ND	1.9	12		mg/Kg	5	7/30/2012 7:53:56 PM	2958
Silver	ND	0.068	1.2		mg/Kg	5	7/25/2012 5:47:33 PM	2958
Vanadium	24	0.10	12		mg/Kg	5	7/26/2012 8:35:53 PM	2958
Zinc	20	1.9	12		mg/Kg	5	7/26/2012 8:35:53 PM	2958

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

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

Analytical Report

Lab Order: 1207900

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-3 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 11:25:00 AM

Lab ID: 1207900-001C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	4.8	3.1	12	J	mg/Kg	5	8/5/2012 5:36:25 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Barium	920	3.0	5.0		mg/Kg	50	8/8/2012 10:13:35 AM	3009
Beryllium	0.77	0.046	0.75		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Chromium	11	0.59	1.5		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Cobalt	5.1	0.34	1.5		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Iron	13000	370	500		mg/Kg	500	8/8/2012 10:16:02 AM	3009
Lead	2.7	1.1	1.2		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Manganese	600	1.1	5.0		mg/Kg	50	8/8/2012 10:13:35 AM	3009
Nickel	8.0	0.83	2.5		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Vanadium	23	0.28	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009
Zinc	42	5.0	12		mg/Kg	5	8/5/2012 5:36:25 PM	3009

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

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

Analytical Report

Lab Order: 1207900

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-002C

Client Sample ID: SWMU 14-3 (1.5-2')
Collection Date: 7/18/2012 12:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	0.63	2.5		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:38:48 PM	3009
Barium	560	1.2	2.0		mg/Kg	20	8/8/2012 10:18:46 AM	3009
Beryllium	0.65	0.0093	0.15		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Cadmium	ND	0.027	0.10		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Chromium	19	0.12	0.30		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Cobalt	3.6	0.069	0.30		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Iron	11000	370	500		mg/Kg	500	8/8/2012 10:21:13 AM	3009
Lead	1.7	0.22	0.25		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Manganese	400	0.42	2.0		mg/Kg	20	8/8/2012 10:18:46 AM	3009
Nickel	6.0	0.17	0.50		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Selenium	ND	1.4	2.5		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Silver	ND	0.035	0.25		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Vanadium	18	0.056	2.5		mg/Kg	1	8/5/2012 6:56:24 PM	3009
Zinc	42	5.0	12		mg/Kg	5	8/5/2012 5:38:48 PM	3009

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

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

Analytical Report

Lab Order: 1207900

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-003C

Client Sample ID: SWMU 14-3 (8-10')
Collection Date: 7/18/2012 12:15:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Barium	380	1.2	2.0		mg/Kg	20	8/8/2012 10:23:59 AM	3009
Beryllium	0.80	0.046	0.75		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Chromium	100	0.59	1.5		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Cobalt	5.6	0.34	1.5		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 10:26:26 AM	3009
Lead	11	1.1	1.2		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Manganese	350	0.42	2.0		mg/Kg	20	8/8/2012 10:23:59 AM	3009
Nickel	9.3	0.83	2.5		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Vanadium	29	0.28	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009
Zinc	67	5.0	12		mg/Kg	5	8/5/2012 5:41:11 PM	3009

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

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

Analytical Report

Lab Order: 1207900

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Project: SWMU NO.14

Lab ID: 1207900-004C

Client Sample ID: SWMU 14-3 (12-14')

Collection Date: 7/18/2012 12:30:00 PM

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Barium	350	1.2	2.0		mg/Kg	20	8/8/2012 10:39:57 AM	3009
Beryllium	0.67	0.046	0.75	J	mg/Kg	5	8/5/2012 5:43:34 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Chromium	110	0.59	1.5		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 10:42:25 AM	3009
Lead	12	1.1	1.2		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Manganese	570	0.42	2.0		mg/Kg	20	8/8/2012 10:39:57 AM	3009
Nickel	8.5	0.83	2.5		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Vanadium	31	0.28	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009
Zinc	65	5.0	12		mg/Kg	5	8/5/2012 5:43:34 PM	3009

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-005C

Client Sample ID: SWMU 14-3 (25.5-26')
Collection Date: 7/18/2012 12:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Barium	630	3.0	5.0		mg/Kg	50	8/8/2012 10:45:10 AM	3009
Beryllium	1.1	0.046	0.75		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Chromium	17	0.59	1.5		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Cobalt	10	0.34	1.5		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Iron	21000	370	500		mg/Kg	500	8/8/2012 10:47:34 AM	3009
Lead	ND	1.1	1.2		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Manganese	1400	1.1	5.0		mg/Kg	50	8/8/2012 10:45:10 AM	3009
Nickel	17	0.83	2.5		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Vanadium	24	0.28	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009
Zinc	34	5.0	12		mg/Kg	5	8/5/2012 5:45:59 PM	3009

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

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

Analytical Report

Lab Order: 1207900

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207900-006C

Client Sample ID: SWMU 14-1 (48-50')
Collection Date: 7/18/2012 1:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Barium	750	3.0	5.0		mg/Kg	50	8/8/2012 10:50:18 AM	3009
Beryllium	1.4	0.046	0.75		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Chromium	20	0.59	1.5		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Cobalt	6.7	0.34	1.5		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Iron	23000	370	500		mg/Kg	500	8/8/2012 10:52:45 AM	3009
Lead	2.0	1.1	1.2		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Manganese	720	1.1	5.0		mg/Kg	50	8/8/2012 10:50:18 AM	3009
Nickel	16	0.83	2.5		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:48:24 PM	3009
Vanadium	9.8	0.28	12	J	mg/Kg	5	8/5/2012 5:48:24 PM	3009
Zinc	23	5.0	12		mg/Kg	5	8/5/2012 5:48:24 PM	3009

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-001C

Client Sample ID: SWMU 14-4 (0-0.5')**Collection Date:** 7/17/2012 1:18:00 PM**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	0.63	2.5		mg/Kg	1	8/9/2012 5:34:54 AM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:54:51 PM	3009
Barium	870	1.2	2.0		mg/Kg	20	8/8/2012 10:55:27 AM	3009
Beryllium	0.33	0.0093	0.15		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Cadmium	ND	0.027	0.10		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Chromium	3.4	0.12	0.30		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Cobalt	2.5	0.069	0.30		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Iron	3200	75	100		mg/Kg	100	8/8/2012 10:57:55 AM	3009
Lead	ND	0.22	0.25		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Manganese	320	0.42	2.0		mg/Kg	20	8/8/2012 10:55:27 AM	3009
Nickel	3.1	0.17	0.50		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Selenium	ND	1.4	2.5		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Silver	ND	0.035	0.25		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Vanadium	17	0.056	2.5		mg/Kg	1	8/5/2012 7:25:13 PM	3009
Zinc	8.3	1.0	2.5		mg/Kg	1	8/5/2012 7:25:13 PM	3009

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-002C

Client Sample ID: SWMU 14-4 (1.5-2.0')
Collection Date: 7/17/2012 1:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	0.63	2.5		mg/Kg	1	8/9/2012 5:37:28 AM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:05:34 PM	3009
Barium	870	1.2	2.0		mg/Kg	20	8/8/2012 11:00:44 AM	3009
Beryllium	0.51	0.0093	0.15		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Cadmium	ND	0.027	0.10		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Chromium	5.2	0.12	0.30		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Cobalt	2.7	0.069	0.30		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Iron	7500	370	500		mg/Kg	500	8/8/2012 11:04:52 AM	3009
Lead	0.37	0.22	0.25		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Manganese	340	0.42	2.0		mg/Kg	20	8/8/2012 11:00:44 AM	3009
Nickel	4.4	0.17	0.50		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Selenium	ND	1.4	2.5		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Silver	ND	0.035	0.25		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Vanadium	13	0.056	2.5		mg/Kg	1	8/5/2012 7:27:43 PM	3009
Zinc	10	1.0	2.5		mg/Kg	1	8/5/2012 7:27:43 PM	3009

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
 Project: SWMU NO.14
 Lab ID: 1207917-003C

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

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

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Barium	460	1.2	2.0		mg/Kg	20	8/8/2012 11:18:39 AM	3009
Beryllium	0.86	0.046	0.75		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Chromium	12	0.59	1.5		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Cobalt	5.0	0.34	1.5		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Iron	16000	370	500		mg/Kg	500	8/8/2012 11:21:06 AM	3009
Lead	2.4	1.1	1.2		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Manganese	720	0.42	2.0		mg/Kg	20	8/8/2012 11:18:39 AM	3009
Nickel	8.6	0.83	2.5		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Vanadium	25	0.28	12		mg/Kg	5	8/5/2012 6:07:55 PM	3009
Zinc	22	5.0	12		mg/Kg	5	8/10/2012 5:27:11 PM	3009

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

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

Project: SWMU NO.14

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

Lab ID: 1207917-004C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Barium	480	3.0	5.0		mg/Kg	50	8/8/2012 11:23:48 AM	3009
Beryllium	1.3	0.046	0.75		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Chromium	22	0.59	1.5		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Cobalt	8.0	0.34	1.5		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Iron	23000	370	500		mg/Kg	500	8/8/2012 11:26:15 AM	3009
Lead	1.4	1.1	1.2		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Manganese	1000	1.1	5.0		mg/Kg	50	8/8/2012 11:23:48 AM	3009
Nickel	17	0.83	2.5		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Vanadium	15	0.28	12		mg/Kg	5	8/5/2012 6:10:19 PM	3009
Zinc	25	5.0	12		mg/Kg	5	8/10/2012 5:31:16 PM	3009

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

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

Analytical Report

Lab Order: **1207917**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: **8/30/2012**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-005C

Client Sample ID: SWMU 14-2 (0-0.5')
Collection Date: 7/17/2012 4:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	4.0	3.1	13	J	mg/Kg	5	8/10/2012 5:33:46 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Barium	700	1.2	2.0		mg/Kg	20	8/8/2012 11:28:59 AM	3009
Beryllium	0.68	0.046	0.75	J	mg/Kg	5	8/5/2012 6:12:43 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Chromium	8.8	0.59	1.5		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Cobalt	4.4	0.34	1.5		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 11:31:24 AM	3009
Lead	3.3	1.1	1.2		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Manganese	510	0.42	2.0		mg/Kg	20	8/8/2012 11:28:59 AM	3009
Nickel	6.2	0.83	2.5		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/8/2012 11:55:49 AM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 6:12:43 PM	3009
Vanadium	31	0.28	12		mg/Kg	5	8/8/2012 11:55:49 AM	3009
Zinc	17	5.0	13		mg/Kg	5	8/10/2012 5:33:46 PM	3009

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-006C

Client Sample ID: SWMU 14-2 (1.5-2.0')
Collection Date: 7/17/2012 4:24:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	3.6	3.1	13	J	mg/Kg	5	8/10/2012 5:43:48 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Barium	470	3.0	5.0		mg/Kg	50	8/10/2012 6:04:10 PM	3107
Beryllium	0.76	0.047	0.75		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Chromium	12	0.59	1.5		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Cobalt	3.8	0.34	1.5		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Iron	11000	370	500		mg/Kg	500	8/10/2012 6:06:36 PM	3107
Lead	4.4	1.1	1.3		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Manganese	530	1.1	5.0		mg/Kg	50	8/10/2012 6:04:10 PM	3107
Nickel	7.3	0.83	2.5		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Vanadium	21	0.28	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107
Zinc	35	5.0	13		mg/Kg	5	8/10/2012 5:43:48 PM	3107

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-2 (8-10')**Project:** SWMU NO.14**Collection Date:** 7/17/2012 4:45:00 PM**Lab ID:** 1207917-007C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	0.82	0.63	2.5	J	mg/Kg	1	8/10/2012 8:35:35 PM	3107
Arsenic	1.6	0.63	2.5	J	mg/Kg	1	8/10/2012 8:35:35 PM	3107
Barium	400	3.0	5.0		mg/Kg	50	8/10/2012 6:11:40 PM	3107
Beryllium	0.58	0.0093	0.15		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Cadmium	ND	0.027	0.10		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Chromium	76	0.59	1.5		mg/Kg	5	8/10/2012 6:09:14 PM	3107
Cobalt	3.7	0.069	0.30		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Iron	14000	370	500		mg/Kg	500	8/10/2012 6:14:05 PM	3107
Lead	4.6	0.22	0.25		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Manganese	400	1.1	5.0		mg/Kg	50	8/10/2012 6:11:40 PM	3107
Nickel	6.6	0.17	0.50		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Selenium	ND	1.4	2.5		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Silver	ND	0.035	0.25		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Vanadium	20	0.057	2.5		mg/Kg	1	8/10/2012 8:35:35 PM	3107
Zinc	37	1.0	2.5		mg/Kg	1	8/10/2012 8:35:35 PM	3107

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Project: SWMU NO.14

Lab ID: 1207917-009C

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

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

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	4.7	3.1	13	J	mg/Kg	5	8/10/2012 6:32:52 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Barium	520	3.0	5.0		mg/Kg	50	8/10/2012 6:36:56 PM	3107
Beryllium	1.3	0.047	0.75		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Chromium	18	0.59	1.5		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Cobalt	7.2	0.34	1.5		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Iron	26000	750	1000		mg/Kg	1000	8/15/2012 7:08:47 AM	3107
Lead	1.2	1.1	1.3	J	mg/Kg	5	8/10/2012 6:32:52 PM	3107
Manganese	1100	1.1	5.0		mg/Kg	50	8/10/2012 6:36:56 PM	3107
Nickel	16	0.83	2.5		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Vanadium	22	0.28	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107
Zinc	26	5.0	13		mg/Kg	5	8/10/2012 6:32:52 PM	3107

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

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

Analytical Report

Lab Order: 1207917

Date Reported: 8/30/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207917-010C

Client Sample ID: SWMU 14-2 (24-25')
Collection Date: 7/17/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	3.3	3.1	13	J	mg/Kg	5	8/10/2012 6:41:43 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Barium	460	3.0	5.0		mg/Kg	50	8/10/2012 6:44:11 PM	3107
Beryllium	1.1	0.047	0.75		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Chromium	18	0.59	1.5		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Cobalt	9.7	0.34	1.5		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Iron	19000	370	500		mg/Kg	500	8/10/2012 6:46:36 PM	3107
Lead	ND	1.1	1.3		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Manganese	980	1.1	5.0		mg/Kg	50	8/10/2012 6:44:11 PM	3107
Nickel	17	0.83	2.5		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Vanadium	52	0.28	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107
Zinc	31	5.0	13		mg/Kg	5	8/10/2012 6:41:43 PM	3107

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

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

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-001C

Client Sample ID: SMWU 14-9 (0-0.5')
Collection Date: 7/18/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	ND	3.1	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Arsenic	ND	3.1	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Barium	480	3.0	5.0		mg/Kg	50	8/10/2012 6:52:46 PM	3107
Beryllium	0.58	0.046	0.75	J	mg/Kg	5	8/10/2012 6:49:12 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Chromium	13	0.59	1.5		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Cobalt	3.8	0.34	1.5		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Iron	14000	370	500		mg/Kg	500	8/10/2012 6:55:13 PM	3107
Lead	5.5	1.1	1.2		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Manganese	1800	1.1	5.0		mg/Kg	50	8/10/2012 6:52:46 PM	3107
Nickel	6.3	0.83	2.5		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Selenium	ND	7.0	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Silver	ND	0.18	1.2		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Vanadium	18	0.28	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107
Zinc	44	5.0	12		mg/Kg	5	8/10/2012 6:49:12 PM	3107

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

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

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-002C

Client Sample ID: SMWU 14-9 (0-0.5') Dup
Collection Date: 7/18/2012 4:20:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	ND	3.1	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Arsenic	ND	3.1	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Barium	490	3.0	5.0		mg/Kg	50	8/10/2012 7:10:33 PM	3107
Beryllium	1.0	0.046	0.75		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Chromium	22	0.59	1.5		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Cobalt	5.9	0.34	1.5		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Iron	18000	370	500		mg/Kg	500	8/10/2012 7:12:57 PM	3107
Lead	40	1.1	1.2		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Manganese	460	1.1	5.0		mg/Kg	50	8/10/2012 7:10:33 PM	3107
Nickel	11	0.83	2.5		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Selenium	ND	7.0	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Silver	ND	0.18	1.2		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Vanadium	29	0.28	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107
Zinc	57	5.0	12		mg/Kg	5	8/10/2012 6:57:51 PM	3107

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-003C

Client Sample ID: SMWU 14-9 (1.5-2')
Collection Date: 7/18/2012 4:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	ND	3.1	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Arsenic	ND	3.1	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Barium	500	3.0	5.0		mg/Kg	50	8/10/2012 7:17:59 PM	3107
Beryllium	0.52	0.046	0.75	J	mg/Kg	5	8/10/2012 7:15:32 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Chromium	10	0.59	1.5		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Cobalt	3.1	0.34	1.5		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Iron	8800	370	500		mg/Kg	500	8/10/2012 7:20:23 PM	3107
Lead	1.9	1.1	1.2		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Manganese	930	1.1	5.0		mg/Kg	50	8/10/2012 7:17:59 PM	3107
Nickel	5.9	0.83	2.5		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Selenium	ND	7.0	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Silver	ND	0.18	1.2		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Vanadium	19	0.28	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107
Zinc	28	5.0	12		mg/Kg	5	8/10/2012 7:15:32 PM	3107

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

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

Analytical Report

Lab Order: 1207922

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/29/2012

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-004C

Client Sample ID: SMWU 14-9 (4-6')
Collection Date: 7/18/2012 4:40:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	ND	3.1	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Barium	200	0.30	0.50		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Beryllium	1.1	0.047	0.75		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Chromium	12	0.59	1.5		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Iron	16000	370	500		mg/Kg	500	8/10/2012 7:27:49 PM	3107
Lead	2.4	1.1	1.3		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Manganese	280	1.1	5.0		mg/Kg	50	8/10/2012 7:25:24 PM	3107
Nickel	8.5	0.83	2.5		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Vanadium	20	0.28	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107
Zinc	17	5.0	13		mg/Kg	5	8/10/2012 7:22:58 PM	3107

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-005C

Client Sample ID: SMWU 14-9 (13-14')
Collection Date: 7/18/2012 5:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	4.5	3.1	13	J	mg/Kg	5	8/10/2012 7:30:27 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Barium	190	0.30	0.50		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Beryllium	1.3	0.047	0.75		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Chromium	19	0.59	1.5		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Cobalt	6.5	0.34	1.5		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Iron	23000	370	500		mg/Kg	500	8/10/2012 7:45:36 PM	3107
Lead	ND	1.1	1.3		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Manganese	460	1.1	5.0		mg/Kg	50	8/10/2012 7:32:53 PM	3107
Nickel	13	0.83	2.5		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Vanadium	29	0.28	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107
Zinc	27	5.0	13		mg/Kg	5	8/10/2012 7:30:27 PM	3107

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

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

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-006C

Client Sample ID: SMWU 14-7 (0-0.5')**Collection Date:** 7/18/2012 6:30:00 PM**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	5.3	3.1	13	J	mg/Kg	5	8/10/2012 7:48:14 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Barium	650	3.0	5.0		mg/Kg	50	8/10/2012 7:50:38 PM	3107
Beryllium	0.76	0.047	0.75		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Chromium	9.6	0.59	1.5		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Cobalt	4.1	0.34	1.5		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Iron	15000	370	500		mg/Kg	500	8/10/2012 7:53:02 PM	3107
Lead	3.5	1.1	1.3		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Manganese	600	1.1	5.0		mg/Kg	50	8/10/2012 7:50:38 PM	3107
Nickel	6.8	0.83	2.5		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Vanadium	22	0.28	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107
Zinc	30	5.0	13		mg/Kg	5	8/10/2012 7:48:14 PM	3107

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

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

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-007C

Client Sample ID: SMWU 14-7 (1.5-2')
Collection Date: 7/18/2012 6:50:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS								
							Analyst: ELS	
Antimony	ND	3.1	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Barium	550	3.0	5.0		mg/Kg	50	8/10/2012 7:58:01 PM	3107
Beryllium	0.68	0.047	0.75	J	mg/Kg	5	8/10/2012 7:55:37 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Chromium	7.1	0.59	1.5		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Cobalt	3.7	0.34	1.5		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Iron	11000	370	500		mg/Kg	500	8/10/2012 8:00:26 PM	3107
Lead	3.2	1.1	1.3		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Manganese	1100	1.1	5.0		mg/Kg	50	8/10/2012 7:58:01 PM	3107
Nickel	5.6	0.83	2.5		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Vanadium	18	0.28	13		mg/Kg	5	8/10/2012 7:55:37 PM	3107
Zinc	12	5.0	13	J	mg/Kg	5	8/10/2012 7:55:37 PM	3107

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207922-008C

Client Sample ID: SMWU 14-7 (6-8')
Collection Date: 7/18/2012 7:10:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS								
Analyst: ELS								
Antimony	4.6	3.1	13	J	mg/Kg	5	8/10/2012 8:03:02 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Barium	2400	3.0	5.0		mg/Kg	50	8/10/2012 8:05:24 PM	3107
Beryllium	1.2	0.047	0.75		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Chromium	14	0.59	1.5		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Cobalt	6.0	0.34	1.5		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Iron	20000	370	500		mg/Kg	500	8/10/2012 8:07:51 PM	3107
Lead	2.6	1.1	1.3		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Manganese	400	1.1	5.0		mg/Kg	50	8/10/2012 8:05:24 PM	3107
Nickel	11	0.83	2.5		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Vanadium	27	0.28	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107
Zinc	22	5.0	13		mg/Kg	5	8/10/2012 8:03:02 PM	3107

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

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

Analytical Report

Lab Order: 1207922

Date Reported: 8/29/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SMWU 14-7 (23.5-24')

Project: SWMU NO.14

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

Lab ID: 1207922-009C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: ELS	
Antimony	4.5	3.1	13	J	mg/Kg	5	8/10/2012 8:22:31 PM	3107
Arsenic	ND	3.1	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Barium	350	3.0	5.0		mg/Kg	50	8/10/2012 8:24:57 PM	3107
Beryllium	1.2	0.047	0.75		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Cadmium	ND	0.14	0.50		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Chromium	17	0.59	1.5		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Cobalt	7.6	0.34	1.5		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Iron	21000	370	500		mg/Kg	500	8/22/2012 7:45:41 AM	3107
Lead	ND	1.1	1.3		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Manganese	740	1.1	5.0		mg/Kg	50	8/10/2012 8:24:57 PM	3107
Nickel	16	0.83	2.5		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Selenium	ND	7.0	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Silver	ND	0.18	1.3		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Vanadium	16	0.28	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107
Zinc	25	5.0	13		mg/Kg	5	8/10/2012 8:22:31 PM	3107

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-10 (0-0.5')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 11:00:00 AM**Lab ID:** 1207940-001C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	3.3	3.1	12	J	mg/Kg	5	8/1/2012 2:33:40 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Barium	430	3.0	5.0		mg/Kg	50	8/5/2012 12:52:36 PM	3008
Beryllium	0.89	0.046	0.75		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Chromium	23	0.59	1.5		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 12:54:47 PM	3008
Lead	7.7	1.1	1.2		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Manganese	510	1.1	5.0		mg/Kg	50	8/5/2012 12:52:36 PM	3008
Nickel	9.3	0.83	2.5		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:32:50 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Vanadium	25	0.28	12		mg/Kg	5	8/1/2012 2:33:40 PM	3008
Zinc	49	5.0	12		mg/Kg	5	8/4/2012 3:32:50 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-10 (1.5-2.0')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 11:05:00 AM**Lab ID:** 1207940-002C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Barium	430	3.0	5.0		mg/Kg	50	8/5/2012 12:57:26 PM	3008
Beryllium	0.83	0.046	0.75		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Chromium	23	0.59	1.5		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Cobalt	5.1	0.34	1.5		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 12:59:38 PM	3008
Lead	6.8	1.1	1.2		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Manganese	530	1.1	5.0		mg/Kg	50	8/5/2012 12:57:26 PM	3008
Nickel	8.8	0.83	2.5		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:35:11 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Vanadium	23	0.28	12		mg/Kg	5	8/1/2012 2:38:44 PM	3008
Zinc	43	5.0	12		mg/Kg	5	8/4/2012 3:35:11 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-003C

Client Sample ID: SWMU 14-8 (0-0.5')
Collection Date: 7/19/2012 11:27:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	4.5	3.1	12	J	mg/Kg	5	8/1/2012 2:43:53 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Barium	610	3.0	5.0		mg/Kg	50	8/5/2012 1:02:12 PM	3008
Beryllium	0.77	0.046	0.75		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Chromium	16	0.59	1.5		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Cobalt	5.0	0.34	1.5		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 1:14:21 PM	3008
Lead	6.2	1.1	1.2		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Manganese	470	1.1	5.0		mg/Kg	50	8/5/2012 1:02:12 PM	3008
Nickel	7.4	0.83	2.5		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:37:35 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Vanadium	25	0.28	12		mg/Kg	5	8/1/2012 2:43:53 PM	3008
Zinc	33	5.0	12		mg/Kg	5	8/4/2012 3:37:35 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-004C

Client Sample ID: SWMU 14-8 (1.5-2.0')

Collection Date: 7/19/2012 11:40:00 AM

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Barium	690	30	50		mg/Kg	500	8/5/2012 1:16:54 PM	3008
Beryllium	0.88	0.046	0.75		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Chromium	10	0.59	1.5		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Cobalt	4.7	0.34	1.5		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Iron	13000	370	500		mg/Kg	500	8/5/2012 1:16:54 PM	3008
Lead	5.0	1.1	1.2		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Manganese	190	0.11	0.50		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Nickel	7.9	0.83	2.5		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:39:56 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Vanadium	18	0.28	12		mg/Kg	5	8/1/2012 2:48:46 PM	3008
Zinc	15	5.0	12		mg/Kg	5	8/4/2012 3:39:56 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Project:** SWMU NO.14**Lab ID:** 1207940-005C**Client Sample ID:** SWMU 14-8 (1.5-2.0') DUP**Collection Date:** 7/19/2012 11:40:00 AM**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Barium	410	6.1	10		mg/Kg	100	8/5/2012 1:21:10 PM	3008
Beryllium	0.93	0.046	0.75		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Chromium	11	0.59	1.5		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Cobalt	5.0	0.34	1.5		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 1:23:20 PM	3008
Lead	3.7	1.1	1.2		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Manganese	210	0.11	0.50		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Nickel	8.5	0.83	2.5		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:42:19 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Vanadium	21	0.28	12		mg/Kg	5	8/1/2012 3:02:41 PM	3008
Zinc	17	5.0	12		mg/Kg	5	8/4/2012 3:42:19 PM	3008

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-12 (0-0.5')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 12:05:00 PM**Lab ID:** 1207940-006C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Barium	150	0.30	0.50		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Beryllium	1.0	0.046	0.75		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Chromium	12	0.59	1.5		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Cobalt	5.9	0.34	1.5		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 1:25:53 PM	3008
Lead	4.4	1.1	1.2		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Manganese	240	0.11	0.50		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Nickel	9.8	0.83	2.5		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:44:40 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Vanadium	23	0.28	12		mg/Kg	5	8/1/2012 3:07:46 PM	3008
Zinc	18	5.0	12		mg/Kg	5	8/4/2012 3:44:40 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-12 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 12:12:00 PM

Lab ID: 1207940-007C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Barium	120	0.30	0.50		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Beryllium	0.95	0.046	0.75		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Chromium	12	0.59	1.5		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Cobalt	5.3	0.34	1.5		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 1:38:51 PM	3008
Lead	2.6	1.1	1.2		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Manganese	300	2.1	10		mg/Kg	100	8/5/2012 1:36:26 PM	3008
Nickel	8.7	0.83	2.5		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:47:03 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Vanadium	22	0.28	12		mg/Kg	5	8/1/2012 3:12:50 PM	3008
Zinc	18	5.0	12		mg/Kg	5	8/4/2012 3:47:03 PM	3008

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-13 (0-0.5')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 12:36:00 PM**Lab ID:** 1207940-008C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Barium	350	6.1	10		mg/Kg	100	8/5/2012 1:41:23 PM	3008
Beryllium	0.97	0.046	0.75		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Chromium	17	0.59	1.5		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Cobalt	5.7	0.34	1.5		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Iron	8400	370	500		mg/Kg	500	8/5/2012 1:43:37 PM	3008
Lead	2.0	1.1	1.2		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Manganese	340	2.1	10		mg/Kg	100	8/5/2012 1:41:23 PM	3008
Nickel	9.1	0.83	2.5		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 3:49:23 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 3:17:52 PM	3008
Zinc	36	5.0	12		mg/Kg	5	8/4/2012 3:49:23 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-13 (1.5-2.0')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 12:45:00 PM**Lab ID:** 1207940-009C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Barium	230	0.30	0.50		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Beryllium	1.0	0.046	0.75		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Chromium	13	0.59	1.5		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Cobalt	5.7	0.34	1.5		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Iron	16000	370	500		mg/Kg	500	8/5/2012 1:48:51 PM	3008
Lead	3.3	1.1	1.2		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Manganese	390	2.1	10		mg/Kg	100	8/5/2012 1:46:28 PM	3008
Nickel	9.5	0.83	2.5		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/4/2012 4:01:53 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Vanadium	23	0.28	12		mg/Kg	5	8/1/2012 3:23:00 PM	3008
Zinc	19	5.0	12		mg/Kg	5	8/4/2012 4:01:53 PM	3008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 9 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-14 (0-0.5')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 1:07:00 PM**Lab ID:** 1207940-010C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Barium	980	6.1	10		mg/Kg	100	8/5/2012 1:51:24 PM	3008
Beryllium	0.93	0.046	0.75		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Chromium	18	0.59	1.5		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Cobalt	5.7	0.34	1.5		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Iron	16000	370	500		mg/Kg	500	8/5/2012 1:55:14 PM	3008
Lead	3.3	1.1	1.2		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Manganese	350	2.1	10		mg/Kg	100	8/5/2012 1:51:24 PM	3008
Nickel	9.1	0.83	2.5		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:04:15 PM	3008
Vanadium	27	0.28	12		mg/Kg	5	8/1/2012 3:37:59 PM	3008
Zinc	34	5.0	12		mg/Kg	5	8/4/2012 4:04:15 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-14 (1.5-2.0')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 1:12:00 PM**Lab ID:** 1207940-011C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Barium	190	0.30	0.50		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Beryllium	1.0	0.047	0.75		mg/kg	5	8/15/2012 8:29:04 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Chromium	11	0.59	1.5		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 1:57:49 PM	3008
Lead	2.9	1.1	1.2		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Manganese	240	0.11	0.50		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Nickel	8.1	0.83	2.5		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:06:36 PM	3008
Vanadium	21	0.28	12		mg/Kg	5	8/1/2012 3:42:54 PM	3008
Zinc	19	5.0	12		mg/Kg	5	8/4/2012 4:06:36 PM	3008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 11 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
 Project: SWMU NO.14
 Lab ID: 1207940-012C

Client Sample ID: SWMU 14-11 (0-0.5')

Collection Date: 7/19/2012 1:33:00 PM

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Barium	590	1.2	2.0		mg/Kg	20	8/5/2012 2:00:21 PM	3008
Beryllium	0.83	0.047	0.75		mg/kg	5	8/15/2012 8:33:02 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Chromium	21	0.59	1.5		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Iron	14000	370	500		mg/Kg	500	8/5/2012 2:10:31 PM	3008
Lead	7.0	1.1	1.2		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Manganese	550	0.42	2.0		mg/Kg	20	8/5/2012 2:00:21 PM	3008
Nickel	9.7	0.83	2.5		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:09:00 PM	3008
Vanadium	25	0.28	12		mg/Kg	5	8/1/2012 3:48:04 PM	3008
Zinc	59	5.0	12		mg/Kg	5	8/4/2012 4:09:00 PM	3008

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-11 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 1:38:00 PM

Lab ID: 1207940-013C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Barium	620	1.2	2.0		mg/Kg	20	8/5/2012 2:13:07 PM	3008
Beryllium	0.84	0.046	0.75		mg/kg	5	8/15/2012 8:36:01 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Chromium	17	0.59	1.5		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Cobalt	4.9	0.34	1.5		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 2:15:18 PM	3008
Lead	5.8	1.1	1.2		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Manganese	700	0.42	2.0		mg/Kg	20	8/5/2012 2:13:07 PM	3008
Nickel	7.9	0.83	2.5		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:11:21 PM	3008
Vanadium	24	0.28	12		mg/Kg	5	8/1/2012 3:53:08 PM	3008
Zinc	38	5.0	12		mg/Kg	5	8/4/2012 4:11:21 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-18 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:08:00 PM

Lab ID: 1207940-014C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Barium	620	1.2	2.0		mg/Kg	20	8/5/2012 2:17:56 PM	3008
Beryllium	0.86	0.046	0.75		mg/kg	5	8/15/2012 8:38:55 AM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Chromium	25	0.59	1.5		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Cobalt	5.2	0.34	1.5		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Iron	16000	370	500		mg/Kg	500	8/5/2012 2:20:11 PM	3008
Lead	10	1.1	1.2		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Manganese	580	0.42	2.0		mg/Kg	20	8/5/2012 2:17:56 PM	3008
Nickel	8.5	0.83	2.5		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:13:45 PM	3008
Vanadium	30	0.28	12		mg/Kg	5	8/1/2012 3:58:16 PM	3008
Zinc	68	5.0	12		mg/Kg	5	8/4/2012 4:13:45 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-18 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 2:15:00 PM

Lab ID: 1207940-015C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Barium	680	1.2	2.0		mg/Kg	20	8/5/2012 2:22:47 PM	3008
Beryllium	0.76	0.046	0.75		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Chromium	26	0.59	1.5		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Cobalt	5.5	0.34	1.5		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Iron	15000	370	500		mg/Kg	500	8/5/2012 2:24:54 PM	3008
Lead	14	1.1	1.2		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Manganese	540	0.42	2.0		mg/Kg	20	8/5/2012 2:22:47 PM	3008
Nickel	8.9	0.83	2.5		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:16:06 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 4:15:18 PM	3008
Zinc	65	5.0	12		mg/Kg	5	8/4/2012 4:16:06 PM	3008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 15 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-5 (0-0.5")**Project:** SWMU NO.14**Collection Date:** 7/19/2012 3:00:00 PM**Lab ID:** 1207940-016C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Barium	490	1.2	2.0		mg/Kg	20	8/5/2012 2:29:09 PM	3008
Beryllium	0.68	0.046	0.75	J	mg/Kg	5	8/4/2012 4:18:27 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Chromium	63	0.59	1.5		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Cobalt	5.3	0.34	1.5		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Iron	18000	370	500		mg/Kg	500	8/5/2012 2:31:23 PM	3008
Lead	14	1.1	1.2		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Manganese	550	0.42	2.0		mg/Kg	20	8/5/2012 2:29:09 PM	3008
Nickel	9.8	0.83	2.5		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:18:27 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 4:20:29 PM	3008
Zinc	190	5.0	12		mg/Kg	5	8/4/2012 4:18:27 PM	3008

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 16 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-5 (0-0.5') DUP**Project:** SWMU NO.14**Collection Date:** 7/19/2012 3:00:00 PM**Lab ID:** 1207940-017C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Barium	460	1.2	2.0		mg/Kg	20	8/5/2012 2:33:58 PM	3008
Beryllium	0.53	0.046	0.75	J	mg/Kg	5	8/4/2012 4:20:48 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Chromium	29	0.59	1.5		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Cobalt	3.9	0.34	1.5		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Iron	12000	370	500		mg/Kg	500	8/5/2012 2:44:11 PM	3008
Lead	9.9	1.1	1.2		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Manganese	870	0.42	2.0		mg/Kg	20	8/5/2012 2:33:58 PM	3008
Nickel	7.1	0.83	2.5		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:20:48 PM	3008
Vanadium	19	0.28	12		mg/Kg	5	8/1/2012 4:25:31 PM	3008
Zinc	160	5.0	12		mg/Kg	5	8/4/2012 4:20:48 PM	3008

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-5 (1.5-2.0')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 3:06:00 PM**Lab ID:** 1207940-018C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	3.4	3.1	12	J	mg/Kg	5	8/1/2012 4:30:33 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Barium	340	1.2	2.0		mg/Kg	20	8/5/2012 2:46:45 PM	3008
Beryllium	0.61	0.046	0.75	J	mg/Kg	5	8/4/2012 4:23:19 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Chromium	11	0.59	1.5		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Cobalt	4.6	0.34	1.5		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Iron	13000	370	500		mg/Kg	500	8/5/2012 2:48:56 PM	3008
Lead	2.5	1.1	1.2		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Manganese	450	0.42	2.0		mg/Kg	20	8/5/2012 2:46:45 PM	3008
Nickel	7.1	0.83	2.5		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:23:19 PM	3008
Vanadium	26	0.28	12		mg/Kg	5	8/1/2012 4:30:33 PM	3008
Zinc	20	5.0	12		mg/Kg	5	8/4/2012 4:23:19 PM	3008

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-19 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 3:26:00 PM

Lab ID: 1207940-019C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Barium	180	0.30	0.50		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Beryllium	0.38	0.046	0.75	J	mg/Kg	5	8/4/2012 4:37:38 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Chromium	6.6	0.59	1.5		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Cobalt	3.2	0.34	1.5		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Iron	8200	370	500		mg/kg	500	8/15/2012 8:55:15 AM	3008
Lead	2.2	1.1	1.2		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Manganese	300	0.42	2.0		mg/kg	20	8/15/2012 8:41:50 AM	3008
Nickel	6.9	0.83	2.5		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/4/2012 4:37:38 PM	3008
Vanadium	22	0.28	12		mg/Kg	5	8/1/2012 4:35:32 PM	3008
Zinc	18	5.0	12		mg/Kg	5	8/4/2012 4:37:38 PM	3008

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-020C

Client Sample ID: SWMU 14-19 (1.5-2.0')
Collection Date: 7/19/2012 3:33:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Arsenic	ND	3.1	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Barium	790	3.0	5.0		mg/kg	50	8/18/2012 11:41:55 AM	3008
Beryllium	0.81	0.046	0.75		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Cadmium	ND	0.14	0.50		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Chromium	12	0.59	1.5		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Cobalt	4.8	0.34	1.5		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Iron	12000	370	500		mg/kg	500	8/18/2012 11:44:19 AM	3008
Lead	4.1	1.1	1.2		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Manganese	640	1.1	5.0		mg/kg	50	8/18/2012 11:41:55 AM	3008
Nickel	8.0	0.83	2.5		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Selenium	ND	7.0	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Silver	ND	0.18	1.2		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Vanadium	21	0.28	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008
Zinc	34	5.0	12		mg/Kg	5	8/1/2012 2:07:41 PM	3008

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

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

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/7/2012

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-17 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:11:00 PM

Lab ID: 1207940-021C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Barium	850	3.0	5.0		mg/Kg	50	8/6/2012 4:20:43 PM	3009
Beryllium	0.86	0.046	0.75		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Chromium	20	0.59	1.5		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Iron	17000	370	500		mg/Kg	500	8/6/2012 4:23:05 PM	3009
Lead	7.1	1.1	1.2		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Manganese	560	1.1	5.0		mg/Kg	50	8/6/2012 4:20:43 PM	3009
Nickel	12	0.83	2.5		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Vanadium	28	0.28	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009
Zinc	230	5.0	12		mg/Kg	5	8/5/2012 5:04:02 PM	3009

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-17 (1.5-2.0')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 4:18:00 PM**Lab ID:** 1207940-022C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Barium	600	3.0	5.0		mg/Kg	50	8/8/2012 9:31:51 AM	3009
Beryllium	0.87	0.046	0.75		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Chromium	25	0.59	1.5		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Cobalt	5.4	0.34	1.5		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Iron	15000	370	500		mg/Kg	500	8/8/2012 9:34:20 AM	3009
Lead	3.2	1.1	1.2		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Manganese	640	1.1	5.0		mg/Kg	50	8/8/2012 9:31:51 AM	3009
Nickel	8.7	0.83	2.5		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Vanadium	27	0.28	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009
Zinc	37	5.0	12		mg/Kg	5	8/5/2012 5:09:28 PM	3009

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

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

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/7/2012

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-023C

Client Sample ID: SWMU 14-16 (0-0.5')
Collection Date: 7/19/2012 4:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Barium	550	3.0	5.0		mg/Kg	50	8/8/2012 9:37:03 AM	3009
Beryllium	0.62	0.046	0.75	J	mg/Kg	5	8/5/2012 5:11:50 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Chromium	13	0.59	1.5		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Cobalt	4.4	0.34	1.5		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Iron	11000	370	500		mg/Kg	500	8/8/2012 9:39:29 AM	3009
Lead	4.8	1.1	1.2		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Manganese	1100	1.1	5.0		mg/Kg	50	8/8/2012 9:37:03 AM	3009
Nickel	6.9	0.83	2.5		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Vanadium	22	0.28	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009
Zinc	69	5.0	12		mg/Kg	5	8/5/2012 5:11:50 PM	3009

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-16 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 4:51:00 PM

Lab ID: 1207940-024C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Barium	1000	3.0	5.0		mg/Kg	50	8/8/2012 12:12:41 PM	3009
Beryllium	0.73	0.046	0.75	J	mg/Kg	5	8/5/2012 5:14:15 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Chromium	15	0.59	1.5		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Cobalt	4.5	0.34	1.5		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Iron	15000	370	500		mg/Kg	500	8/8/2012 12:15:05 PM	3009
Lead	5.1	1.1	1.2		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Manganese	560	1.1	5.0		mg/Kg	50	8/8/2012 12:12:41 PM	3009
Nickel	7.1	0.83	2.5		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Vanadium	25	0.28	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009
Zinc	25	5.0	12		mg/Kg	5	8/5/2012 5:14:15 PM	3009

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 24 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1207940-025C

Client Sample ID: SWMU 14-15 (0-0.5')
Collection Date: 7/19/2012 5:14:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Barium	670	3.0	5.0		mg/Kg	50	8/8/2012 9:42:14 AM	3009
Beryllium	0.67	0.046	0.75	J	mg/Kg	5	8/5/2012 5:18:23 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Chromium	14	0.59	1.5		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Cobalt	4.7	0.34	1.5		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Iron	12000	370	500		mg/Kg	500	8/8/2012 9:44:39 AM	3009
Lead	4.1	1.1	1.2		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Manganese	540	1.1	5.0		mg/Kg	50	8/8/2012 9:42:14 AM	3009
Nickel	8.2	0.83	2.5		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Vanadium	23	0.28	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009
Zinc	140	5.0	12		mg/Kg	5	8/5/2012 5:18:23 PM	3009

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

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

Analytical Report

Lab Order: 1207940

Date Reported: 9/7/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-15 (1.5-2.0')

Project: SWMU NO.14

Collection Date: 7/19/2012 5:19:00 PM

Lab ID: 1207940-026C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS					Analyst: JLF			
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Barium	650	3.0	5.0		mg/Kg	50	8/8/2012 9:47:22 AM	3009
Beryllium	0.51	0.046	0.75	J	mg/Kg	5	8/5/2012 5:20:48 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Chromium	8.9	0.59	1.5		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Cobalt	3.6	0.34	1.5		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Iron	7300	370	500		mg/Kg	500	8/8/2012 9:49:47 AM	3009
Lead	1.3	1.1	1.2		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Manganese	360	1.1	5.0		mg/Kg	50	8/8/2012 9:47:22 AM	3009
Nickel	5.6	0.83	2.5		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Vanadium	20	0.28	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009
Zinc	68	5.0	12		mg/Kg	5	8/5/2012 5:20:48 PM	3009

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 26 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-20 (0-0.5')**Project:** SWMU NO.14**Collection Date:** 7/19/2012 5:50:00 PM**Lab ID:** 1207940-027C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Barium	940	3.0	5.0		mg/Kg	50	8/8/2012 10:03:14 AM	3009
Beryllium	0.69	0.046	0.75	J	mg/Kg	5	8/5/2012 5:31:38 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Chromium	9.4	0.59	1.5		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Cobalt	5.2	0.69	3.0		mg/Kg	10	8/8/2012 11:34:09 AM	3009
Iron	13000	370	500		mg/Kg	500	8/8/2012 10:05:39 AM	3009
Lead	2.7	1.1	1.2		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Manganese	650	1.1	5.0		mg/Kg	50	8/8/2012 10:03:14 AM	3009
Nickel	6.9	0.83	2.5		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Vanadium	21	0.28	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009
Zinc	17	5.0	12		mg/Kg	5	8/5/2012 5:31:38 PM	3009

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-20 (0-0.5') DUP**Project:** SWMU NO.14**Collection Date:** 7/19/2012 5:50:00 PM**Lab ID:** 1207940-028C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	3.1	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Arsenic	ND	3.1	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Barium	890	3.0	5.0		mg/Kg	50	8/8/2012 10:08:22 AM	3009
Beryllium	0.76	0.046	0.75		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Cadmium	ND	0.14	0.50		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Chromium	8.7	0.59	1.5		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Cobalt	7.0	0.34	1.5		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Iron	14000	370	500		mg/Kg	500	8/8/2012 10:10:49 AM	3009
Lead	3.0	1.1	1.2		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Manganese	910	1.1	5.0		mg/Kg	50	8/8/2012 10:08:22 AM	3009
Nickel	8.0	0.83	2.5		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Selenium	ND	7.0	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Silver	ND	0.18	1.2		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Vanadium	24	0.28	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009
Zinc	22	5.0	12		mg/Kg	5	8/5/2012 5:34:01 PM	3009

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-001C

Client Sample ID: SWMU 14-6 (0-0.5')
Collection Date: 10/9/2012 1:35:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Barium	350	0.61	1.0		mg/Kg	10	10/17/2012 2:56:55 PM	4298
Beryllium	1.0	0.046	0.75		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Chromium	9.7	0.59	1.5		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Cobalt	5.0	0.34	1.5		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Iron	15000	370	500		mg/Kg	500	10/17/2012 2:59:21 PM	4298
Lead	6.4	1.1	1.2		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Manganese	420	0.21	1.0		mg/Kg	10	10/17/2012 2:56:55 PM	4298
Nickel	8.2	0.83	2.5		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:39:07 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Vanadium	17	0.28	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298
Zinc	17	5.0	12		mg/Kg	5	10/16/2012 5:38:30 PM	4298

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-002C

Client Sample ID: SWMU 14-6 (1.5-2')
Collection Date: 10/9/2012 1:45:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS								Analyst: JLF
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Barium	330	0.61	1.0		mg/Kg	10	10/17/2012 3:01:57 PM	4298
Beryllium	0.78	0.046	0.75		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Chromium	23	0.59	1.5		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Cobalt	4.5	0.34	1.5		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Iron	13000	370	500		mg/Kg	500	10/17/2012 3:14:30 PM	4298
Lead	5.6	1.1	1.2		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Manganese	370	0.21	1.0		mg/Kg	10	10/17/2012 3:01:57 PM	4298
Nickel	7.1	0.83	2.5		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:44:25 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Vanadium	23	0.28	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298
Zinc	26	5.0	12		mg/Kg	5	10/16/2012 5:43:36 PM	4298

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-6 (10-12')**Project:** SWMU NO.14**Collection Date:** 10/9/2012 1:55:00 PM**Lab ID:** 1210582-003C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Barium	340	0.61	1.0		mg/Kg	10	10/17/2012 3:17:21 PM	4298
Beryllium	0.83	0.046	0.75		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Chromium	9.1	0.59	1.5		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Cobalt	4.7	0.34	1.5		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Iron	13000	370	500		mg/Kg	500	10/17/2012 3:19:44 PM	4298
Lead	4.5	1.1	1.2		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Manganese	340	0.21	1.0		mg/Kg	10	10/17/2012 3:17:21 PM	4298
Nickel	7.6	0.83	2.5		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:46:48 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Vanadium	21	0.28	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298
Zinc	16	5.0	12		mg/Kg	5	10/16/2012 5:50:19 PM	4298

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-6 (17-18')**Project:** SWMU NO.14**Collection Date:** 10/9/2012 2:10:00 PM**Lab ID:** 1210582-004C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Barium	290	0.61	1.0		mg/Kg	10	10/17/2012 3:22:21 PM	4298
Beryllium	0.87	0.046	0.75		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Chromium	8.9	0.59	1.5		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Cobalt	5.6	0.34	1.5		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Iron	16000	370	500		mg/Kg	500	10/17/2012 3:27:16 PM	4298
Lead	2.9	1.1	1.2		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Manganese	1100	1.1	5.0		mg/Kg	50	10/17/2012 3:24:47 PM	4298
Nickel	11	0.83	2.5		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:49:15 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 5:55:27 PM	4298
Vanadium	9.0	0.28	12	J	mg/Kg	5	10/16/2012 5:55:27 PM	4298
Zinc	17	5.0	12		mg/Kg	5	10/16/2012 5:55:27 PM	4298

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-21 (0-0.5')**Project:** SWMU NO.14**Collection Date:** 10/9/2012 3:35:00 PM**Lab ID:** 1210582-005C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS						Analyst: JLF		
Antimony	ND	3.1	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Barium	470	0.61	1.0		mg/Kg	10	10/17/2012 3:29:50 PM	4298
Beryllium	0.49	0.046	0.75	J	mg/Kg	5	10/16/2012 6:00:28 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Chromium	5.7	0.59	1.5		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Cobalt	3.2	0.34	1.5		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Iron	11000	370	500		mg/Kg	500	10/17/2012 3:34:44 PM	4298
Lead	10	1.1	1.2		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Manganese	550	1.1	5.0		mg/Kg	50	10/17/2012 3:32:16 PM	4298
Nickel	4.3	0.83	2.5		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:51:43 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Vanadium	17	0.28	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298
Zinc	29	5.0	12		mg/Kg	5	10/16/2012 6:00:28 PM	4298

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-21 (1.5-2')**Project:** SWMU NO.14**Collection Date:** 10/9/2012 3:45:00 PM**Lab ID:** 1210582-006C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/23/2012 7:54:10 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Barium	750	3.0	5.0		mg/Kg	50	10/17/2012 3:52:04 PM	4298
Beryllium	0.74	0.046	0.75	J	mg/Kg	5	10/16/2012 6:14:02 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Chromium	7.4	0.59	1.5		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Cobalt	3.9	0.34	1.5		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Iron	12000	370	500		mg/Kg	500	10/17/2012 3:54:29 PM	4298
Lead	5.0	1.1	1.2		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Manganese	550	1.1	5.0		mg/Kg	50	10/17/2012 3:52:04 PM	4298
Nickel	6.1	0.83	2.5		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:54:10 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Vanadium	16	0.28	12		mg/Kg	5	10/16/2012 6:14:02 PM	4298
Zinc	22	5.0	12		mg/Kg	5	10/16/2012 6:14:02 PM	4298

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 6 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210582-007C

Client Sample ID: SWMU 14-21 (8-10')
Collection Date: 10/9/2012 4:00:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/23/2012 7:56:35 PM	4298
Arsenic	ND	3.1	12		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Barium	160	0.30	0.50		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Beryllium	0.91	0.046	0.75		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Cadmium	ND	0.14	0.50		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Chromium	8.0	0.59	1.5		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Cobalt	4.3	0.34	1.5		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Iron	12000	370	500		mg/Kg	500	10/17/2012 3:57:07 PM	4298
Lead	4.7	1.1	1.2		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Manganese	220	0.11	0.50		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Nickel	7.3	0.83	2.5		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:56:35 PM	4298
Silver	ND	0.18	1.2		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Vanadium	14	0.28	12		mg/Kg	5	10/16/2012 6:18:57 PM	4298
Zinc	13	5.0	12		mg/Kg	5	10/16/2012 6:18:57 PM	4298

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

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

Analytical Report

Lab Order: 1210583

Date Reported: 11/12/2012

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-22 (0-0.5")

Project: SWMU No.14

Collection Date: 10/9/2012 4:45:00 PM

Lab ID: 1210583-001C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	3.1	12		mg/Kg	5	10/23/2012 7:59:00 PM	4300
Arsenic	ND	3.1	12		mg/Kg	5	10/23/2012 7:59:00 PM	4300
Barium	630	1.2	2.0		mg/Kg	20	10/23/2012 8:18:50 PM	4300
Beryllium	0.90	0.046	0.75		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Cadmium	ND	0.14	0.50		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Chromium	12	0.59	1.5		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Cobalt	5.5	0.34	1.5		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Iron	15000	370	500		mg/Kg	500	10/17/2012 2:19:56 PM	4300
Lead	5.9	1.1	1.2		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Manganese	550	0.42	2.0		mg/Kg	20	10/23/2012 8:18:50 PM	4300
Nickel	8.3	0.83	2.5		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Selenium	ND	7.0	12		mg/Kg	5	10/23/2012 7:59:00 PM	4300
Silver	ND	0.18	1.2		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Vanadium	25	0.28	12		mg/Kg	5	10/17/2012 2:07:35 PM	4300
Zinc	33	5.0	12		mg/Kg	5	10/17/2012 2:07:35 PM	4300

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-002C

Client Sample ID: SWMU 14-22 (1.5-2')
Collection Date: 10/9/2012 4:55:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:21:15 PM	4300
Arsenic	1.6	1.3	5.0	J	mg/Kg	2	10/17/2012 12:11:16 PM	4300
Barium	430	0.61	1.0		mg/Kg	10	10/17/2012 2:22:31 PM	4300
Beryllium	0.83	0.019	0.30		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Chromium	10	0.24	0.60		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Cobalt	4.2	0.14	0.60		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Iron	14000	370	500		mg/Kg	500	10/17/2012 2:24:56 PM	4300
Lead	4.3	0.44	0.50		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Manganese	540	0.42	2.0		mg/Kg	20	10/23/2012 8:23:45 PM	4300
Nickel	7.2	0.33	1.0		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:21:15 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Vanadium	17	0.11	5.0		mg/Kg	2	10/17/2012 12:11:16 PM	4300
Zinc	20	2.0	5.0		mg/Kg	2	10/17/2012 12:11:16 PM	4300

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-22 (4-6')

Project: SWMU No.14

Collection Date: 10/9/2012 5:20:00 PM

Lab ID: 1210583-003C

Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:26:10 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Barium	170	0.30	0.50		mg/Kg	5	10/17/2012 2:39:25 PM	4300
Beryllium	0.89	0.019	0.30		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Chromium	7.6	0.24	0.60		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Cobalt	4.3	0.14	0.60		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Iron	13000	370	500		mg/Kg	500	10/17/2012 2:44:12 PM	4300
Lead	4.0	0.44	0.50		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Manganese	370	0.21	1.0		mg/Kg	10	10/17/2012 2:41:49 PM	4300
Nickel	7.2	0.33	1.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:26:10 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Vanadium	13	0.11	5.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300
Zinc	13	2.0	5.0		mg/Kg	2	10/17/2012 12:16:23 PM	4300

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-22 (4-6') DUP**Project:** SWMU No.14**Collection Date:** 10/9/2012 5:20:00 PM**Lab ID:** 1210583-004C**Matrix:** Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:28:35 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Barium	170	0.30	0.50		mg/Kg	5	10/17/2012 2:46:48 PM	4300
Beryllium	0.84	0.019	0.30		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Chromium	6.8	0.24	0.60		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Cobalt	3.9	0.14	0.60		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Iron	12000	370	500		mg/Kg	500	10/17/2012 2:49:14 PM	4300
Lead	4.2	0.44	0.50		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Manganese	230	0.11	0.50		mg/Kg	5	10/17/2012 2:46:48 PM	4300
Nickel	6.5	0.33	1.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:28:35 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Vanadium	12	0.11	5.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300
Zinc	12	2.0	5.0		mg/Kg	2	10/17/2012 12:21:23 PM	4300

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Company
Project: SWMU No.14
Lab ID: 1210583-005C

Client Sample ID: SWMU 14-22 (8-10')
Collection Date: 10/9/2012 5:30:00 PM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/23/2012 8:30:59 PM	4300
Arsenic	ND	1.3	5.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Barium	250	0.61	1.0		mg/Kg	10	10/17/2012 2:51:50 PM	4300
Beryllium	0.80	0.019	0.30		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Cadmium	ND	0.054	0.20		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Chromium	9.3	0.24	0.60		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Cobalt	3.8	0.14	0.60		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Iron	13000	370	500		mg/Kg	500	10/17/2012 2:54:18 PM	4300
Lead	3.9	0.44	0.50		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Manganese	270	0.21	1.0		mg/Kg	10	10/17/2012 2:51:50 PM	4300
Nickel	7.4	0.33	1.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Selenium	ND	2.8	5.0		mg/Kg	2	10/23/2012 8:30:59 PM	4300
Silver	ND	0.071	0.50		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Vanadium	13	0.11	5.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300
Zinc	14	2.0	5.0		mg/Kg	2	10/17/2012 12:28:03 PM	4300

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1210656

Date Reported: 11/13/2012

CLIENT: Western Refining Company

Client Sample ID: SWMU 14-23 (0-0.5')

Project: SWMU NO.14

Collection Date: 10/10/2012 1:45:00 PM

Lab ID: 1210656-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Arsenic	2.2	5.0	J	mg/Kg	2	10/25/2012 3:06:37 PM
Barium	600	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Beryllium	0.61	0.30		mg/Kg	2	10/25/2012 3:06:37 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 3:06:37 PM
Chromium	9.6	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Cobalt	3.4	0.60		mg/Kg	2	10/25/2012 3:06:37 PM
Iron	13000	500		mg/Kg	500	10/25/2012 3:39:26 PM
Lead	4.2	0.50		mg/Kg	2	10/25/2012 3:06:37 PM
Manganese	720	5.0		mg/Kg	50	10/25/2012 3:37:00 PM
Nickel	5.9	1.0		mg/Kg	2	10/25/2012 3:06:37 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:41:44 PM
Vanadium	18	5.0		mg/Kg	2	10/25/2012 3:06:37 PM
Zinc	140	12		mg/Kg	5	10/25/2012 3:21:25 PM

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-23 (1.5-2')**Project:** SWMU NO.14**Collection Date:** 10/10/2012 1:55:00 PM**Lab ID:** 1210656-002**Matrix:** SOIL**Received Date:** 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Arsenic	3.0	5.0	J	mg/Kg	2	10/25/2012 8:22:15 PM
Barium	460	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Beryllium	0.62	0.30		mg/Kg	2	10/25/2012 8:22:15 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:22:15 PM
Chromium	15	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Cobalt	3.7	0.60		mg/Kg	2	10/25/2012 8:22:15 PM
Iron	12000	500		mg/Kg	500	10/25/2012 8:27:45 PM
Lead	7.6	0.50		mg/Kg	2	10/25/2012 8:22:15 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:25:06 PM
Nickel	6.5	1.0		mg/Kg	2	10/25/2012 8:22:15 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 2:53:24 PM
Vanadium	16	5.0		mg/Kg	2	10/25/2012 8:22:15 PM
Zinc	41	5.0		mg/Kg	2	10/25/2012 8:22:15 PM

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-23 (12-14')**Project:** SWMU NO.14**Collection Date:** 10/10/2012 2:05:00 PM**Lab ID:** 1210656-003**Matrix:** SOIL**Received Date:** 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Arsenic	1.6	5.0	J	mg/Kg	2	10/25/2012 8:45:39 PM
Barium	220	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Beryllium	0.87	0.30		mg/Kg	2	10/25/2012 8:45:39 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:45:39 PM
Chromium	8.3	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:45:39 PM
Iron	13000	500		mg/Kg	500	10/25/2012 8:51:11 PM
Lead	3.7	0.50		mg/Kg	2	10/25/2012 8:45:39 PM
Manganese	300	2.0		mg/Kg	20	10/25/2012 8:48:33 PM
Nickel	7.2	1.0		mg/Kg	2	10/25/2012 8:45:39 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:08:43 PM
Vanadium	14	5.0		mg/Kg	2	10/25/2012 8:45:39 PM
Zinc	13	5.0		mg/Kg	2	10/25/2012 8:45:39 PM

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Company**Client Sample ID:** SWMU 14-23 (14-16')**Project:** SWMU NO.14**Collection Date:** 10/10/2012 2:15:00 PM**Lab ID:** 1210656-004**Matrix:** SOIL**Received Date:** 10/12/2012 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Arsenic	1.3	5.0	J	mg/Kg	2	10/25/2012 8:56:59 PM
Barium	130	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Beryllium	0.75	0.30		mg/Kg	2	10/25/2012 8:56:59 PM
Cadmium	ND	0.20		mg/Kg	2	10/25/2012 8:56:59 PM
Chromium	7.8	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Cobalt	4.0	0.60		mg/Kg	2	10/25/2012 8:56:59 PM
Iron	12000	500		mg/Kg	500	10/25/2012 9:02:34 PM
Lead	3.5	0.50		mg/Kg	2	10/25/2012 8:56:59 PM
Manganese	570	2.0		mg/Kg	20	10/25/2012 8:59:50 PM
Nickel	6.8	1.0		mg/Kg	2	10/25/2012 8:56:59 PM
Selenium	ND	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Silver	ND	0.50		mg/Kg	2	10/31/2012 3:11:38 PM
Vanadium	15	5.0		mg/Kg	2	10/25/2012 8:56:59 PM
Zinc	12	5.0		mg/Kg	2	10/25/2012 8:56:59 PM

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

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

Analytical ReportLab Order: **1210860**Date Reported: **11/16/2012****Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210860-001C

Client Sample ID: SWMU 14-24 (0-0.5')
Collection Date: 10/17/2012 10:15:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Arsenic	2.1	1.3	5.0	J	mg/Kg	2	10/25/2012 12:21:41 PM	4440
Barium	440	0.61	1.0		mg/Kg	10	10/25/2012 2:09:26 PM	4440
Beryllium	0.80	0.019	0.30		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Chromium	10	0.24	0.60		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Cobalt	4.6	0.14	0.60		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Iron	15000	370	500		mg/Kg	500	11/2/2012 7:08:54 AM	4440
Lead	2.5	0.44	0.50		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Manganese	450	0.21	1.0		mg/Kg	10	10/25/2012 2:09:26 PM	4440
Nickel	8.0	0.33	1.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:23:58 PM	4440
Vanadium	22	0.11	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440
Zinc	25	2.0	5.0		mg/Kg	2	10/25/2012 12:21:41 PM	4440

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

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

Analytical ReportLab Order: **1210860**Date Reported: **11/16/2012****Hall Environmental Analysis Laboratory, Inc.**

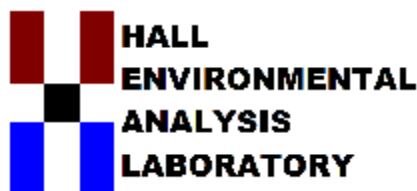
CLIENT: Western Refining Company
Project: SWMU NO.14
Lab ID: 1210860-002C

Client Sample ID: SWMU 14-24 (1.5-2')
Collection Date: 10/17/2012 10:30:00 AM
Matrix: Soil

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 6010B: SOIL METALS							Analyst: JLF	
Antimony	ND	1.3	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Arsenic	1.7	1.3	5.0	J	mg/Kg	2	10/25/2012 12:26:50 PM	4440
Barium	43	0.12	0.20		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Beryllium	0.83	0.019	0.30		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Cadmium	ND	0.054	0.20		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Chromium	7.8	0.24	0.60		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Cobalt	3.5	0.14	0.60		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Iron	16000	370	500		mg/Kg	500	11/2/2012 7:21:58 AM	4440
Lead	3.3	0.44	0.50		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Manganese	230	0.21	1.0		mg/Kg	10	10/25/2012 2:14:32 PM	4440
Nickel	6.4	0.33	1.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Selenium	ND	2.8	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Silver	ND	0.071	0.50		mg/Kg	2	10/31/2012 1:26:49 PM	4440
Vanadium	14	0.11	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440
Zinc	12	2.0	5.0		mg/Kg	2	10/25/2012 12:26:50 PM	4440

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

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



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

August 03, 2012

Ed Riege

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: SWMU NO.14

OrderNo.: 1207748

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/18/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (0-0.5)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:15:00 PM

Lab ID: 1207748-001

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	33	9.9		mg/Kg	1	7/20/2012 9:15:31 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/20/2012 9:15:31 AM
Surr: DNOP	121	77.6-140		%REC	1	7/20/2012 9:15:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/20/2012 3:30:59 AM
Surr: BFB	102	69.7-121		%REC	1	7/20/2012 3:30:59 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.038	0.033		mg/Kg	1	7/20/2012 2:58:09 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	7/26/2012 8:30:20 PM
Arsenic	ND	12		mg/Kg	5	7/25/2012 5:36:01 PM
Barium	790	2.0		mg/Kg	20	7/25/2012 5:52:08 PM
Beryllium	ND	0.75		mg/Kg	5	7/26/2012 8:30:20 PM
Cadmium	ND	0.50		mg/Kg	5	7/25/2012 5:36:01 PM
Chromium	6.8	1.5		mg/Kg	5	7/25/2012 5:36:01 PM
Cobalt	5.4	1.5		mg/Kg	5	7/26/2012 8:30:20 PM
Iron	9000	500		mg/Kg	500	7/31/2012 6:15:57 PM
Lead	3.6	1.2		mg/Kg	5	7/25/2012 5:36:01 PM
Manganese	570	2.0		mg/Kg	20	7/30/2012 7:33:13 PM
Nickel	6.1	2.5		mg/Kg	5	7/26/2012 8:30:20 PM
Selenium	ND	12		mg/Kg	5	7/30/2012 7:30:35 PM
Silver	ND	1.2		mg/Kg	5	7/25/2012 5:36:01 PM
Vanadium	17	12		mg/Kg	5	7/26/2012 8:30:20 PM
Zinc	21	12		mg/Kg	5	7/26/2012 8:30:20 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (0-0.5)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:15:00 PM

Lab ID: 1207748-001

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2-Chloronaphthalene	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
Di-n-octyl phthalate	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
3,3'-Dichlorobenzidine	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 6:35:04 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Fluorene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Naphthalene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (0-0.5)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:15:00 PM

Lab ID: 1207748-001

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
4-Nitrophenol	ND	1.2		mg/Kg	1	7/26/2012 6:35:04 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 6:35:04 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 6:35:04 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 6:35:04 PM
Surr: 2,4,6-Tribromophenol	68.1	20.1-121		%REC	1	7/26/2012 6:35:04 PM
Surr: 2-Fluorobiphenyl	60.0	19-133		%REC	1	7/26/2012 6:35:04 PM
Surr: 2-Fluorophenol	53.8	20.2-108		%REC	1	7/26/2012 6:35:04 PM
Surr: 4-Terphenyl-d14	57.8	18.9-115		%REC	1	7/26/2012 6:35:04 PM
Surr: Nitrobenzene-d5	59.7	20.8-123		%REC	1	7/26/2012 6:35:04 PM
Surr: Phenol-d5	53.0	19.8-115		%REC	1	7/26/2012 6:35:04 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Toluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Ethylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Xylenes, Total	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,4-Trimethylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,3,5-Trimethylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dichloroethane (EDC)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dibromoethane (EDB)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Naphthalene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1-Methylnaphthalene	ND	3.34		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Methylnaphthalene	ND	3.34		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Acetone	ND	8.35		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Bromobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Bromodichloromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Bromoform	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Butanone	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Carbon tetrachloride	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Chlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Chloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Chloroform	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (0-0.5)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:15:00 PM

Lab ID: 1207748-001

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Chlorotoluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Carbon disulfide	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
4-Chlorotoluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
cis-1,2-DCE	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
cis-1,3-Dichloropropene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dibromo-3-chloropropane	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Dibromochloromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Dibromomethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,3-Dichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,4-Dichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Dichlorodifluoromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1-Dichloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1-Dichloroethene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2-Dichloropropane	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,3-Dichloropropane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2,2-Dichloropropane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1-Dichloropropene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Hexachlorobutadiene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Isopropylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
4-Isopropyltoluene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Methylene chloride	ND	8.35		µg/Kg-dry	1	7/18/2012 3:33:05 PM
n-Butylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
2-Hexanone	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
n-Propylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
sec-Butylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Styrene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
4-Methyl-2-pentanone	ND	1.67		µg/Kg-dry	1	7/18/2012 3:33:05 PM
tert-Butylbenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,1,2-Tetrachloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,2,2-Tetrachloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Tetrachloroethene (PCE)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
trans-1,2-DCE	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
trans-1,3-Dichloropropene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,3-Trichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,4-Trichlorobenzene	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,1-Trichloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,1,2-Trichloroethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Trichloroethene (TCE)	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Trichlorofluoromethane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
1,2,3-Trichloropropane	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (0-0.5)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:15:00 PM

Lab ID: 1207748-001

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.835		µg/Kg-dry	1	7/18/2012 3:33:05 PM
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	7/18/2012 3:33:05 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	7/18/2012 3:33:05 PM
Surr: Dibromofluoromethane	103	70-130		%REC	1	7/18/2012 3:33:05 PM
Surr: Toluene-d8	102	70-130		%REC	1	7/18/2012 3:33:05 PM

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Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (1.5-2)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:20:00 PM

Lab ID: 1207748-002

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	30	10		mg/Kg	1	7/20/2012 10:42:33 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/20/2012 10:42:33 AM
Surr: DNOP	121	77.6-140		%REC	1	7/20/2012 10:42:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/20/2012 3:59:43 AM
Surr: BFB	102	69.7-121		%REC	1	7/20/2012 3:59:43 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	7/20/2012 2:59:54 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	7/26/2012 8:33:08 PM
Arsenic	ND	12		mg/Kg	5	7/25/2012 5:42:55 PM
Barium	550	2.0		mg/Kg	20	7/25/2012 5:54:25 PM
Beryllium	0.89	0.75		mg/Kg	5	7/26/2012 8:33:08 PM
Cadmium	ND	0.50		mg/Kg	5	7/25/2012 5:42:55 PM
Chromium	11	1.5		mg/Kg	5	7/25/2012 5:42:55 PM
Cobalt	5.1	1.5		mg/Kg	5	7/26/2012 8:33:08 PM
Iron	17000	500		mg/Kg	500	7/31/2012 6:23:35 PM
Lead	4.6	1.2		mg/Kg	5	7/25/2012 5:42:55 PM
Manganese	510	2.0		mg/Kg	20	7/30/2012 7:40:43 PM
Nickel	8.3	2.5		mg/Kg	5	7/26/2012 8:33:08 PM
Selenium	ND	50		mg/Kg	20	7/30/2012 7:40:43 PM
Silver	ND	1.2		mg/Kg	5	7/25/2012 5:42:55 PM
Vanadium	26	12		mg/Kg	5	7/26/2012 8:33:08 PM
Zinc	21	12		mg/Kg	5	7/26/2012 8:33:08 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Aniline	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Anthracene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Azobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (1.5-2)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:20:00 PM

Lab ID: 1207748-002

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Carbazole	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Chrysene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/26/2012 7:04:57 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Fluorene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Isophorone	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Naphthalene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM

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Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (1.5-2)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:20:00 PM

Lab ID: 1207748-002

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/26/2012 7:04:57 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/26/2012 7:04:57 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Phenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Pyrene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Pyridine	ND	2.5		mg/Kg	1	7/26/2012 7:04:57 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/26/2012 7:04:57 PM
Surr: 2,4,6-Tribromophenol	93.8	20.1-121		%REC	1	7/26/2012 7:04:57 PM
Surr: 2-Fluorobiphenyl	77.9	19-133		%REC	1	7/26/2012 7:04:57 PM
Surr: 2-Fluorophenol	75.9	20.2-108		%REC	1	7/26/2012 7:04:57 PM
Surr: 4-Terphenyl-d14	91.3	18.9-115		%REC	1	7/26/2012 7:04:57 PM
Surr: Nitrobenzene-d5	81.4	20.8-123		%REC	1	7/26/2012 7:04:57 PM
Surr: Phenol-d5	67.7	19.8-115		%REC	1	7/26/2012 7:04:57 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Toluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Ethylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Xylenes, Total	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Methyl tert-butyl ether (MTBE)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,4-Trimethylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,3,5-Trimethylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dichloroethane (EDC)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dibromoethane (EDB)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Naphthalene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1-Methylnaphthalene	ND	3.48		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Methylnaphthalene	ND	3.48		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Acetone	ND	8.71		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Bromobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Bromodichloromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Bromoform	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Butanone	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Carbon tetrachloride	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Chlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Chloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Chloroform	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM

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Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (1.5-2)

Project: SWMU NO.14

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Received Date: 7/18/2012 9:15:00 AM

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METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Chlorotoluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Carbon disulfide	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
4-Chlorotoluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
cis-1,2-DCE	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
cis-1,3-Dichloropropene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dibromo-3-chloropropane	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Dibromochloromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Dibromomethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,3-Dichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,4-Dichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Dichlorodifluoromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1-Dichloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1-Dichloroethene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2-Dichloropropane	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,3-Dichloropropane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2,2-Dichloropropane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1-Dichloropropene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Hexachlorobutadiene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Isopropylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
4-Isopropyltoluene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Methylene chloride	ND	8.71		µg/Kg-dry	1	7/18/2012 4:03:02 PM
n-Butylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
2-Hexanone	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
n-Propylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
sec-Butylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Styrene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
4-Methyl-2-pentanone	ND	1.74		µg/Kg-dry	1	7/18/2012 4:03:02 PM
tert-Butylbenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,1,2-Tetrachloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,2,2-Tetrachloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Tetrachloroethene (PCE)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
trans-1,2-DCE	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
trans-1,3-Dichloropropene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,3-Trichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,4-Trichlorobenzene	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,1-Trichloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,1,2-Trichloroethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Trichloroethene (TCE)	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Trichlorofluoromethane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
1,2,3-Trichloropropane	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (1.5-2)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:20:00 PM

Lab ID: 1207748-002

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.871		µg/Kg-dry	1	7/18/2012 4:03:02 PM
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%REC	1	7/18/2012 4:03:02 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	1	7/18/2012 4:03:02 PM
Surr: Dibromofluoromethane	96.4	70-130		%REC	1	7/18/2012 4:03:02 PM
Surr: Toluene-d8	102	70-130		%REC	1	7/18/2012 4:03:02 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (10-12)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:30:00 PM

Lab ID: 1207748-003

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	220	10		mg/Kg	1	7/20/2012 8:26:08 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/20/2012 8:26:08 AM
Surr: DNOP	114	77.6-140		%REC	1	7/20/2012 8:26:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/21/2012 4:56:40 AM
Surr: BFB	124	69.7-121	S	%REC	1	7/21/2012 4:56:40 AM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	ND	0.033		mg/Kg	1	7/20/2012 3:01:39 PM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	7/26/2012 8:35:53 PM
Arsenic	ND	12		mg/Kg	5	7/25/2012 5:47:33 PM
Barium	1100	5.0		mg/Kg	50	7/25/2012 5:56:42 PM
Beryllium	ND	0.75		mg/Kg	5	7/26/2012 8:35:53 PM
Cadmium	ND	0.50		mg/Kg	5	7/25/2012 5:47:33 PM
Chromium	11	1.5		mg/Kg	5	7/25/2012 5:47:33 PM
Cobalt	5.0	1.5		mg/Kg	5	7/26/2012 8:35:53 PM
Iron	14000	500		mg/Kg	500	7/31/2012 6:26:11 PM
Lead	2.5	1.2		mg/Kg	5	7/25/2012 5:47:33 PM
Manganese	590	2.0		mg/Kg	20	7/30/2012 7:56:33 PM
Nickel	7.6	2.5		mg/Kg	5	7/26/2012 8:35:53 PM
Selenium	ND	12		mg/Kg	5	7/30/2012 7:53:56 PM
Silver	ND	1.2		mg/Kg	5	7/25/2012 5:47:33 PM
Vanadium	24	12		mg/Kg	5	7/26/2012 8:35:53 PM
Zinc	20	12		mg/Kg	5	7/26/2012 8:35:53 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Acenaphthylene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Aniline	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Anthracene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Azobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benz(a)anthracene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(a)pyrene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(g,h,i)perylene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzo(k)fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Benzoic acid	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
Benzyl alcohol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Bis(2-chloroisopropyl)ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM

Qualifiers:

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- S Spike Recovery outside accepted recovery limits

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (10-12)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:30:00 PM

Lab ID: 1207748-003

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 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	7/26/2012 7:34:47 PM
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Carbazole	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Chloro-3-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
4-Chloroaniline	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2-Chloronaphthalene	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
2-Chlorophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Chrysene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Di-n-butyl phthalate	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
Di-n-octyl phthalate	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
Dibenz(a,h)anthracene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Dibenzofuran	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
3,3'-Dichlorobenzidine	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
Diethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Dimethyl phthalate	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dichlorophenol	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dimethylphenol	ND	0.30		mg/Kg	1	7/26/2012 7:34:47 PM
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dinitrophenol	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
2,4-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2,6-Dinitrotoluene	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
Fluoranthene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Fluorene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachlorobutadiene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachlorocyclopentadiene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Hexachloroethane	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Isophorone	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
1-Methylnaphthalene	0.49	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2-Methylphenol	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
3+4-Methylphenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Naphthalene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (10-12)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:30:00 PM

Lab ID: 1207748-003

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Nitroaniline	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
Nitrobenzene	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
2-Nitrophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
4-Nitrophenol	ND	0.25		mg/Kg	1	7/26/2012 7:34:47 PM
Pentachlorophenol	ND	0.40		mg/Kg	1	7/26/2012 7:34:47 PM
Phenanthrene	0.57	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Phenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Pyrene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Pyridine	ND	0.50		mg/Kg	1	7/26/2012 7:34:47 PM
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	7/26/2012 7:34:47 PM
Surr: 2,4,6-Tribromophenol	81.4	20.1-121		%REC	1	7/26/2012 7:34:47 PM
Surr: 2-Fluorobiphenyl	79.0	19-133		%REC	1	7/26/2012 7:34:47 PM
Surr: 2-Fluorophenol	66.6	20.2-108		%REC	1	7/26/2012 7:34:47 PM
Surr: 4-Terphenyl-d14	75.6	18.9-115		%REC	1	7/26/2012 7:34:47 PM
Surr: Nitrobenzene-d5	77.7	20.8-123		%REC	1	7/26/2012 7:34:47 PM
Surr: Phenol-d5	72.5	19.8-115		%REC	1	7/26/2012 7:34:47 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Toluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Ethylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Xylenes, Total	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Methyl tert-butyl ether (MTBE)	13.1	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,4-Trimethylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,3,5-Trimethylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dichloroethane (EDC)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dibromoethane (EDB)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Naphthalene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Methylnaphthalene	ND	3.52		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Acetone	ND	8.81		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Bromobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Bromodichloromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Bromoform	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Butanone	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Carbon tetrachloride	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Chlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Chloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Chloroform	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (10-12)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:30:00 PM

Lab ID: 1207748-003

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Chlorotoluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Carbon disulfide	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
4-Chlorotoluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
cis-1,2-DCE	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
cis-1,3-Dichloropropene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dibromo-3-chloropropane	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Dibromochloromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Dibromomethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,3-Dichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,4-Dichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Dichlorodifluoromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1-Dichloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1-Dichloroethene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2-Dichloropropane	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,3-Dichloropropane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2,2-Dichloropropane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1-Dichloropropene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Hexachlorobutadiene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Isopropylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
4-Isopropyltoluene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Methylene chloride	ND	8.81		µg/Kg-dry	1	7/18/2012 4:33:06 PM
n-Butylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
2-Hexanone	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
n-Propylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
sec-Butylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Styrene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
4-Methyl-2-pentanone	ND	1.76		µg/Kg-dry	1	7/18/2012 4:33:06 PM
tert-Butylbenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,1,2-Tetrachloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,2,2-Tetrachloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Tetrachloroethene (PCE)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
trans-1,2-DCE	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
trans-1,3-Dichloropropene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,3-Trichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,4-Trichlorobenzene	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,1-Trichloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,1,2-Trichloroethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Trichloroethene (TCE)	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Trichlorofluoromethane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
1,2,3-Trichloropropane	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207748

Date Reported: 8/3/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-1 (10-12)

Project: SWMU NO.14

Collection Date: 7/16/2012 4:30:00 PM

Lab ID: 1207748-003

Matrix: SOIL

Received Date: 7/18/2012 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.881		µg/Kg-dry	1	7/18/2012 4:33:06 PM
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%REC	1	7/18/2012 4:33:06 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%REC	1	7/18/2012 4:33:06 PM
Surr: Dibromofluoromethane	99.4	70-130		%REC	1	7/18/2012 4:33:06 PM
Surr: Toluene-d8	101	70-130		%REC	1	7/18/2012 4:33:06 PM

Qualifiers:

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

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

Anatek Labs, Inc.

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

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

Batch #: 120720030
Project Name: 1207748

Analytical Results Report

Sample Number	120720030-001	Sampling Date	7/16/2012	Date/Time Received	7/20/2012 1:15 PM
Client Sample ID	1207748-001D / SWMU 14-1 (0-0.5)	Sampling Time	4:15 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.01	7/30/2012	CRW	EPA 335.4	

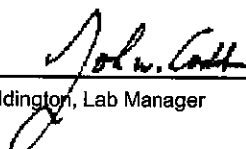
Sample Number	120720030-002	Sampling Date	7/16/2012	Date/Time Received	7/20/2012 1:15 PM
Client Sample ID	1207748-002D / SWMU 14-1 (1.5-2)	Sampling Time	4:20 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.01	7/30/2012	CRW	EPA 335.4	

Sample Number	120720030-003	Sampling Date	7/16/2012	Date/Time Received	7/20/2012 1:15 PM
Client Sample ID	1207748-003D / SWMU 14-1 (10-12)	Sampling Time	4:30 PM		
Matrix	Soil				
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/Kg	0.01	7/30/2012	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:C596
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095

Thursday, August 02, 2012

Page 1 of 1

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2911	SampType: MBLK		TestCode: EPA Method 8015B: Diesel Range Organics						
Client ID:	PBS	Batch ID: 2911		RunNo: 4133						
Prep Date:	7/19/2012	Analysis Date: 7/19/2012		SeqNo: 118627		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		114	77.6	140			

Sample ID	LCS-2911		SampType: LCS		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 2911		RunNo: 4133					
Prep Date:	7/19/2012		Analysis Date: 7/19/2012		SeqNo: 118783		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.1	52.6	130			
Surr: DNOP	4.6		5.000		91.0	77.6	140			

Sample ID	1207748-001CMS	SampType: MS			TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 14-1 (0-0.5)	Batch ID: 2911			RunNo: 4172					
Prep Date:	7/19/2012	Analysis Date: 7/20/2012			SeqNo: 120061		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.8	49.21	33.03	73.8	57.2	146			
Surr: DNOP	4.7		4.921		95.0	77.6	140			

Sample ID	1207748-001CMSD		SampType: MSD		TestCode: EPA Method 8015B: Diesel Range Organics					
Client ID:	SWMU 14-1 (0-0.5)		Batch ID: 2911		RunNo: 4172					
Prep Date:	7/19/2012		Analysis Date: 7/20/2012		SeqNo: 120062		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	75	10	50.15	33.03	83.6	57.2	146	7.81	24.5	
Surr: DNOP	4.7		5.015		94.2	77.6	140	0	0	

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2878		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 2878		RunNo: 4160					
Prep Date:	7/18/2012		Analysis Date: 7/19/2012		SeqNo: 119360		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	69.7	121			

Sample ID	LCS-2878		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 2878		RunNo: 4160					
Prep Date:	7/18/2012		Analysis Date: 7/19/2012		SeqNo: 119361		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	85	115			
Surr: BFB	1100		1000		109	69.7	121			

Sample ID	1207548-001AMS		SampType: MS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 2878		RunNo: 4160					
Prep Date:	7/18/2012		Analysis Date: 7/19/2012		SeqNo: 119368		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.7	23.39	0	98.5	85.4	147			
Surr: BFB	990		935.5		106	69.7	121			

Sample ID	1207548-001AMSD		SampType: MSD		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC		Batch ID: 2878		RunNo: 4160					
Prep Date:	7/18/2012		Analysis Date: 7/19/2012		SeqNo: 119369		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	23.85	0	95.0	85.4	147	1.61	19.2	
Surr: BFB	1000		954.2		109	69.7	121	0	0	

Sample ID	MB-2915		SampType: MBLK		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	PBS		Batch ID: 2915		RunNo: 4189					
Prep Date:	7/19/2012		Analysis Date: 7/21/2012		SeqNo: 121067		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.7	69.7	121			

Sample ID	LCS-2915		SampType: LCS		TestCode: EPA Method 8015B: Gasoline Range					
Client ID:	LCSS		Batch ID: 2915		RunNo: 4189					
Prep Date:	7/19/2012		Analysis Date: 7/21/2012		SeqNo: 121068		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	85	115			
Surr: BFB	1000		1000		104	69.7	121			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2881		SampType: MBLK		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	PBS		Batch ID: 2881		RunNo: 4146					
Prep Date:	7/18/2012		Analysis Date: 7/18/2012		SeqNo: 118507		Units: µg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.00								
Toluene	ND	1.00								
Ethylbenzene	ND	1.00								
Xylenes, Total	ND	2.00								
Methyl tert-butyl ether (MTBE)	ND	1.00								
1,2,4-Trimethylbenzene	ND	1.00								
1,3,5-Trimethylbenzene	ND	1.00								
1,2-Dichloroethane (EDC)	ND	1.00								
1,2-Dibromoethane (EDB)	ND	1.00								
Naphthalene	ND	1.00								
1-Methylnaphthalene	ND	4.00								
2-Methylnaphthalene	ND	4.00								
Acetone	ND	10.0								
Bromobenzene	ND	1.00								
Bromodichloromethane	ND	1.00								
Bromoform	ND	1.00								
2-Butanone	ND	2.00								
Carbon tetrachloride	ND	1.00								
Chlorobenzene	ND	1.00								
Chloroethane	ND	1.00								
Chloroform	ND	1.00								
Chloromethane	ND	1.00								
2-Chlorotoluene	ND	1.00								
Carbon disulfide	ND	2.00								
4-Chlorotoluene	ND	1.00								
cis-1,2-DCE	ND	1.00								
cis-1,3-Dichloropropene	ND	1.00								
1,2-Dibromo-3-chloropropane	ND	2.00								
Dibromochloromethane	ND	1.00								
Dibromomethane	ND	1.00								
1,2-Dichlorobenzene	ND	1.00								
1,3-Dichlorobenzene	ND	1.00								
1,4-Dichlorobenzene	ND	1.00								
Dichlorodifluoromethane	ND	1.00								
1,1-Dichloroethane	ND	1.00								
1,1-Dichloroethene	ND	1.00								
1,2-Dichloropropane	ND	2.00								
1,3-Dichloropropane	ND	1.00								
2,2-Dichloropropane	ND	1.00								
1,1-Dichloropropene	ND	1.00								
Hexachlorobutadiene	ND	1.00								

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2881		SampType: MBLK			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	PBS		Batch ID: 2881			RunNo: 4146				
Prep Date:	7/18/2012		Analysis Date: 7/18/2012			SeqNo: 118507 Units: µg/Kg-dry				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.00								
4-Isopropyltoluene	ND	1.00								
Methylene chloride	ND	10.0								
n-Butylbenzene	ND	1.00								
2-Hexanone	ND	2.00								
n-Propylbenzene	ND	1.00								
sec-Butylbenzene	ND	1.00								
Styrene	ND	1.00								
4-Methyl-2-pentanone	ND	2.00								
tert-Butylbenzene	ND	1.00								
1,1,1,2-Tetrachloroethane	ND	1.00								
1,1,2,2-Tetrachloroethane	ND	1.00								
Tetrachloroethene (PCE)	ND	1.00								
trans-1,2-DCE	ND	1.00								
trans-1,3-Dichloropropene	ND	1.00								
1,2,3-Trichlorobenzene	ND	1.00								
1,2,4-Trichlorobenzene	ND	1.00								
1,1,1-Trichloroethane	ND	1.00								
1,1,2-Trichloroethane	ND	1.00								
Trichloroethene (TCE)	ND	1.00								
Trichlorofluoromethane	ND	1.00								
1,2,3-Trichloropropane	ND	1.00								
Vinyl chloride	ND	1.00								
Surr: 1,2-Dichloroethane-d4	55.0		50.00		110	70	130			
Surr: 4-Bromofluorobenzene	46.9		50.00		93.9	70	130			
Surr: Dibromofluoromethane	50.6		50.00		101	70	130			
Surr: Toluene-d8	47.4		50.00		94.7	70	130			

Sample ID	lcs-2881		SampType: LCS			TestCode: Method 8260B/5035LOW: VOLATILES				
Client ID:	LCSS		Batch ID: 2881			RunNo: 4146				
Prep Date:	7/18/2012		Analysis Date: 7/18/2012			SeqNo: 118508 Units: µg/Kg-dry				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	10.2	1.00	10.00	0	102	60	140			
Toluene	10.8	1.00	10.00	0	108	60	140			
Chlorobenzene	11.1	1.00	10.00	0	111	60	140			
1,1-Dichloroethene	11.7	1.00	10.00	0	117	60	140			
Trichloroethene (TCE)	11.2	1.00	10.00	0	112	60	140			
Surr: 1,2-Dichloroethane-d4	54.9		50.00		110	70	130			
Surr: 4-Bromofluorobenzene	50.2		50.00		100	70	130			
Surr: Dibromofluoromethane	51.4		50.00		103	70	130			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	lcs-2881		SampType: LCS		TestCode: Method 8260B/5035LOW: VOLATILES					
Client ID:	LCSS		Batch ID: 2881		RunNo: 4146					
Prep Date:	7/18/2012		Analysis Date: 7/18/2012		SeqNo: 118508		Units: µg/Kg-dry			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	50.3		50.00		101	70	130			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2996	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBS	Batch ID:	2996	RunNo:	4454					
Prep Date:	7/24/2012	Analysis Date:	7/26/2012	SeqNo:	124345	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.20								
Acenaphthylene	ND	0.20								
Aniline	ND	0.20								
Anthracene	ND	0.20								
Azobenzene	ND	0.20								
Benz(a)anthracene	ND	0.20								
Benzo(a)pyrene	ND	0.20								
Benzo(b)fluoranthene	ND	0.20								
Benzo(g,h,i)perylene	ND	0.20								
Benzo(k)fluoranthene	ND	0.20								
Benzoic acid	ND	0.50								
Benzyl alcohol	ND	0.20								
Bis(2-chloroethoxy)methane	ND	0.20								
Bis(2-chloroethyl)ether	ND	0.20								
Bis(2-chloroisopropyl)ether	ND	0.20								
Bis(2-ethylhexyl)phthalate	ND	0.50								
4-Bromophenyl phenyl ether	ND	0.20								
Butyl benzyl phthalate	ND	0.20								
Carbazole	ND	0.20								
4-Chloro-3-methylphenol	ND	0.50								
4-Chloroaniline	ND	0.50								
2-Chloronaphthalene	ND	0.25								
2-Chlorophenol	ND	0.20								
4-Chlorophenyl phenyl ether	ND	0.20								
Chrysene	ND	0.20								
Di-n-butyl phthalate	ND	0.50								
Di-n-octyl phthalate	ND	0.25								
Dibenz(a,h)anthracene	ND	0.20								
Dibenzofuran	ND	0.20								
1,2-Dichlorobenzene	ND	0.20								
1,3-Dichlorobenzene	ND	0.20								
1,4-Dichlorobenzene	ND	0.20								
3,3'-Dichlorobenzidine	ND	0.25								
Diethyl phthalate	ND	0.20								
Dimethyl phthalate	ND	0.20								
2,4-Dichlorophenol	ND	0.40								
2,4-Dimethylphenol	ND	0.30								
4,6-Dinitro-2-methylphenol	ND	0.50								
2,4-Dinitrophenol	ND	0.40								
2,4-Dinitrotoluene	ND	0.50								
2,6-Dinitrotoluene	ND	0.50								

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	mb-2996		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124345		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoranthene	ND	0.20								
Fluorene	ND	0.20								
Hexachlorobenzene	ND	0.20								
Hexachlorobutadiene	ND	0.20								
Hexachlorocyclopentadiene	ND	0.20								
Hexachloroethane	ND	0.20								
Indeno(1,2,3-cd)pyrene	ND	0.20								
Isophorone	ND	0.50								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
2-Methylphenol	ND	0.50								
3+4-Methylphenol	ND	0.20								
N-Nitrosodi-n-propylamine	ND	0.20								
N-Nitrosodiphenylamine	ND	0.20								
Naphthalene	ND	0.20								
2-Nitroaniline	ND	0.20								
3-Nitroaniline	ND	0.20								
4-Nitroaniline	ND	0.40								
Nitrobenzene	ND	0.50								
2-Nitrophenol	ND	0.20								
4-Nitrophenol	ND	0.25								
Pentachlorophenol	ND	0.40								
Phenanthrene	ND	0.20								
Phenol	ND	0.20								
Pyrene	ND	0.20								
Pyridine	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.20								
2,4,5-Trichlorophenol	ND	0.20								
2,4,6-Trichlorophenol	ND	0.20								
Surr: 2,4,6-Tribromophenol	3.4		3.330		102	20.1	121			
Surr: 2-Fluorobiphenyl	1.3		1.670		79.2	19	133			
Surr: 2-Fluorophenol	2.2		3.330		67.3	20.2	108			
Surr: 4-Terphenyl-d14	1.5		1.670		87.9	18.9	115			
Surr: Nitrobenzene-d5	1.3		1.670		77.2	20.8	123			
Surr: Phenol-d5	2.7		3.330		82.4	19.8	115			

Sample ID	lcs-2996		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSS		Batch ID: 2996		RunNo: 4454					
Prep Date:	7/24/2012		Analysis Date: 7/26/2012		SeqNo: 124346		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

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

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

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

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

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2919		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 2919		RunNo: 4199					
Prep Date:	7/19/2012		Analysis Date: 7/20/2012		SeqNo: 120246		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.033								

Sample ID	LCS-2919		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 2919		RunNo: 4199					
Prep Date:	7/19/2012		Analysis Date: 7/20/2012		SeqNo: 120247		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	102	80	120			

Sample ID	1207796-008AMS		SampType: MS		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 2919		RunNo: 4199					
Prep Date:	7/19/2012		Analysis Date: 7/20/2012		SeqNo: 120251		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1661	0	98.8	75	125			

Sample ID	1207796-008AMSD		SampType: MSD		TestCode: EPA Method 7471: Mercury					
Client ID:	BatchQC		Batch ID: 2919		RunNo: 4199					
Prep Date:	7/19/2012		Analysis Date: 7/20/2012		SeqNo: 120252		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.16	0.033	0.1643	0	98.0	75	125	1.87	20	

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	MB-2958	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 2958			RunNo: 4414					
Prep Date:	7/22/2012	Analysis Date: 7/25/2012			SeqNo: 123218		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID	LCS-2958		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 2958		RunNo: 4414					
Prep Date:	7/22/2012		Analysis Date: 7/25/2012		SeqNo: 123219		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	25	2.5	25.00	0.8270	98.4	80	120			
Barium	25	0.10	25.00	0	101	80	120			
Cadmium	25	0.10	25.00	0	101	80	120			
Chromium	25	0.30	25.00	0	99.0	80	120			
Lead	25	0.25	25.00	0	101	80	120			
Selenium	23	2.5	25.00	0	93.8	80	120			
Silver	5.1	0.25	5.000	0	101	80	120			

Sample ID	1207556-001AMS	SampType: MS			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID: 2958			RunNo: 4414					
Prep Date:	7/22/2012	Analysis Date: 7/25/2012			SeqNo: 123222		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5	24.80	0	0	75	125			S
Barium	25	0.10	24.80	1.334	97.1	75	125			
Cadmium	25	0.10	24.80	0	100	75	125			
Chromium	34	0.30	24.80	9.377	100	75	125			
Lead	71	0.25	24.80	46.37	99.3	75	125			E
Selenium	ND	2.5	24.80	0	0	75	125			S
Silver	4.8	0.25	4.961	0	97.6	75	125			

Sample ID	1207556-001AMSD		SampType: MSD		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	BatchQC		Batch ID: 2958		RunNo: 4414					
Prep Date:	7/22/2012		Analysis Date: 7/25/2012		SeqNo: 123225		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5	24.83	0	0	75	125	0	20	S
Barium	25	0.10	24.83	1.334	95.3	75	125	1.65	20	
Cadmium	24	0.10	24.83	0	98.3	75	125	1.75	20	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207748

03-Aug-12

Client: Western Refining Southwest, Gallup

Project: SWMU NO.14

Sample ID	1207556-001AMSD	SampType:	MSD	TestCode:	EPA Method 6010B: Soil Metals					
Client ID:	BatchQC	Batch ID:	2958	RunNo:	4414					
Prep Date:	7/22/2012	Analysis Date:	7/25/2012	SeqNo:	123225	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	32	0.30	24.83	9.377	92.7	75	125	5.72	20	
Lead	70	0.25	24.83	46.37	93.7	75	125	1.95	20	E
Selenium	ND	2.5	24.83	0	0	75	125	0	20	S
Silver	4.8	0.25	4.966	0	95.9	75	125	1.69	20	

Qualifiers:

*/X Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit



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: 1207748

Received by/date:

[Signature]

07/18/12

Logged By: Ashley Gallegos

7/18/2012 9:15:00 AM

[Signature]

Completed By: Ashley Gallegos

7/18/2012 2:44:10 PM

[Signature]

Reviewed By:

JB 07/18/12

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
7/19/12	1615	SOIL	SWMU 14-1 (0-0.5)	ZENCORES	-	-001
				Z VIALS	MEOH	
				Z JARS	-	
	1620	SOIL	SWMU 14-1 (1.5-2)	ZENCORES	-	-002
				Z VIALS	MEOH	
				Z JARS	-	
	1630	SOIL	SWMU 14-1 (10-12)	ZENCORES	-	-003
				Z VIALS	MEOH	
				Z JARS	-	

Remarks:

Received by:	Date:
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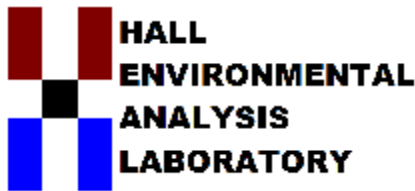
Date:	Time:	Relinquished by:
-------	-------	------------------

Date:	Time:	Relinquished by:
-------	-------	------------------

Received by: _____ Date _____ Time _____

Date _____ Time _____

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



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

August 22, 2012

Scott Crouch

Western Refining Southwest, Gallup

Rt. 3 Box 7

Gallup, NM 87301

TEL:

FAX

RE: SWMU NO.14

OrderNo.: 1207900

Dear Scott Crouch:

Hall Environmental Analysis Laboratory received 10 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-3 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 11:25:00 AM

Lab ID: 1207900-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	640	200		mg/Kg	20	7/21/2012 9:53:29 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	7/21/2012 9:53:29 PM
Surr: DNOP	0	77.6-140	S	%REC	20	7/21/2012 9:53:29 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	20		mg/Kg	4	7/25/2012 4:17:15 PM
Surr: BFB	99.8	84-116		%REC	4	7/25/2012 4:17:15 PM
EPA METHOD 7471: MERCURY						Analyst: DBD
Mercury	0.15	0.033		mg/Kg	1	8/2/2012 10:41:11 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Antimony	ND	12		mg/Kg	5	8/5/2012 5:36:25 PM
Arsenic	ND	12		mg/Kg	5	8/5/2012 5:36:25 PM
Barium	920	5.0		mg/Kg	50	8/8/2012 10:13:35 AM
Beryllium	0.77	0.75		mg/Kg	5	8/5/2012 5:36:25 PM
Cadmium	ND	0.50		mg/Kg	5	8/5/2012 5:36:25 PM
Chromium	11	1.5		mg/Kg	5	8/5/2012 5:36:25 PM
Cobalt	5.1	1.5		mg/Kg	5	8/5/2012 5:36:25 PM
Iron	13000	500		mg/Kg	500	8/8/2012 10:16:02 AM
Lead	2.7	1.2		mg/Kg	5	8/5/2012 5:36:25 PM
Manganese	600	5.0		mg/Kg	50	8/8/2012 10:13:35 AM
Nickel	8.0	2.5		mg/Kg	5	8/5/2012 5:36:25 PM
Selenium	ND	12		mg/Kg	5	8/5/2012 5:36:25 PM
Silver	ND	1.2		mg/Kg	5	8/5/2012 5:36:25 PM
Vanadium	23	12		mg/Kg	5	8/5/2012 5:36:25 PM
Zinc	42	12		mg/Kg	5	8/5/2012 5:36:25 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Acenaphthylene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Aniline	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Anthracene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Azobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benz(a)anthracene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(a)pyrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(b)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzo(k)fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Benzoic acid	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
Benzyl alcohol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Bis(2-chloroethoxy)methane	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Bis(2-chloroethyl)ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Bis(2-chloroisopropyl)ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-3 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 11:25:00 AM

Lab ID: 1207900-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-ethylhexyl)phthalate	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
4-Bromophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Butyl benzyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Carbazole	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Chloro-3-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
4-Chloroaniline	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2-Chloronaphthalene	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
2-Chlorophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Chlorophenyl phenyl ether	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Chrysene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Di-n-butyl phthalate	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
Di-n-octyl phthalate	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Dibenzofuran	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
1,2-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
1,3-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
1,4-Dichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
3,3'-Dichlorobenzidine	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
Diethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Dimethyl phthalate	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dichlorophenol	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dimethylphenol	ND	1.5		mg/Kg	1	7/25/2012 6:47:58 PM
4,6-Dinitro-2-methylphenol	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dinitrophenol	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2,6-Dinitrotoluene	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
Fluoranthene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Fluorene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachlorobutadiene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachlorocyclopentadiene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Hexachloroethane	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Isophorone	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
1-Methylnaphthalene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2-Methylnaphthalene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2-Methylphenol	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
3+4-Methylphenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
N-Nitrosodi-n-propylamine	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
N-Nitrosodiphenylamine	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Naphthalene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-3 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 11:25:00 AM

Lab ID: 1207900-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
3-Nitroaniline	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Nitroaniline	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
Nitrobenzene	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
2-Nitrophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
4-Nitrophenol	ND	1.3		mg/Kg	1	7/25/2012 6:47:58 PM
Pentachlorophenol	ND	2.0		mg/Kg	1	7/25/2012 6:47:58 PM
Phenanthrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Phenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Pyrene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Pyridine	ND	2.5		mg/Kg	1	7/25/2012 6:47:58 PM
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4,5-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
2,4,6-Trichlorophenol	ND	1.0		mg/Kg	1	7/25/2012 6:47:58 PM
Surr: 2,4,6-Tribromophenol	115	20.1-121		%REC	1	7/25/2012 6:47:58 PM
Surr: 2-Fluorobiphenyl	108	19-133		%REC	1	7/25/2012 6:47:58 PM
Surr: 2-Fluorophenol	99.8	20.2-108		%REC	1	7/25/2012 6:47:58 PM
Surr: 4-Terphenyl-d14	112	18.9-115		%REC	1	7/25/2012 6:47:58 PM
Surr: Nitrobenzene-d5	114	20.8-123		%REC	1	7/25/2012 6:47:58 PM
Surr: Phenol-d5	98.8	19.8-115		%REC	1	7/25/2012 6:47:58 PM
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Benzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Toluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Ethylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Xylenes, Total	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,4-Trimethylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,3,5-Trimethylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dichloroethane (EDC)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dibromoethane (EDB)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Naphthalene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1-Methylnaphthalene	ND	3.99		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Methylnaphthalene	ND	3.99		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Acetone	ND	9.99		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Bromobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Bromodichloromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Bromoform	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Butanone	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Carbon tetrachloride	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Chlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Chloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Chloroform	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-3 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 11:25:00 AM

Lab ID: 1207900-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Chloromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Chlorotoluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Carbon disulfide	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
4-Chlorotoluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
cis-1,2-DCE	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
cis-1,3-Dichloropropene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dibromo-3-chloropropane	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Dibromochloromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Dibromomethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,3-Dichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,4-Dichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Dichlorodifluoromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1-Dichloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1-Dichloroethene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2-Dichloropropane	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,3-Dichloropropane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2,2-Dichloropropane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1-Dichloropropene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Hexachlorobutadiene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Isopropylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
4-Isopropyltoluene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Methylene chloride	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
n-Butylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
2-Hexanone	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
n-Propylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
sec-Butylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Styrene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
4-Methyl-2-pentanone	ND	2.00		µg/Kg-dry	1	7/20/2012 11:53:02 AM
tert-Butylbenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,1,2-Tetrachloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,2,2-Tetrachloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Tetrachloroethene (PCE)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
trans-1,2-DCE	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
trans-1,3-Dichloropropene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,3-Trichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,4-Trichlorobenzene	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,1-Trichloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,1,2-Trichloroethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Trichloroethene (TCE)	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Trichlorofluoromethane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
1,2,3-Trichloropropane	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM

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- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
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- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207900

Date Reported: 8/22/2012

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: SWMU 14-3 (0-0.5')

Project: SWMU NO.14

Collection Date: 7/18/2012 11:25:00 AM

Lab ID: 1207900-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
METHOD 8260B/5035LOW: VOLATILES						Analyst: MMS
Vinyl chloride	ND	0.999		µg/Kg-dry	1	7/20/2012 11:53:02 AM
Surr: 1,2-Dichloroethane-d4	107	70-130		%REC	1	7/20/2012 11:53:02 AM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	1	7/20/2012 11:53:02 AM
Surr: Dibromofluoromethane	100	70-130		%REC	1	7/20/2012 11:53:02 AM
Surr: Toluene-d8	110	70-130		%REC	1	7/20/2012 11:53:02 AM

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