AP-111

AGWMR (11)

2014

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

! Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

2014 2nd Quarter

Project #:

OW WELLS

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.0

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.	8260+MTBE	WQCC Metals - Total	WQCC Metals - Dissolved - Filtered	Major Cations/Anions	8015B extended										Air Bubbles (Y or N)
	1150 CS 06/09/14		Per Anne			1406363															
6/3/14	~~955~~	H20	OW-1			-001	X	X	X	X	X										
6/3/14	1415	H20	OW-10			-002	X	X	X	X	X										
6/3/14	0953	H20	OW-13			-003	X	X	X												
6-3-14	0832	H20	OW-14			-004	X	X	X												
6-2-14	1522	H20	OW-29			-005	X	X	X												
6/3/14	1305	H20	OW-30			-006	X	X	X												
6/5/14	1115	H20	FB-GROUP3-6/5/14			-007	X	X	X	X	X										
			TB			-008	X				X										
			A 06/09/14						CS	06/09/14											

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/6/14	1550	Rax Landers Rax Landers			
Date:	Time:	Relinquished by:	Received by:	Date	Time
				06/06/14	1550

Remarks:

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

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

March 21, 2014

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q1-2014 Groundwater Sampling OrderNo.: 1403307

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/7/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 12:38:00 PM
Lab ID: 1403307-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/12/2014 4:17:56 AM	12114
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2014 4:17:56 AM	12114
Surr: DNOP	123	62.7-145		%REC	1	3/12/2014 4:17:56 AM	12114
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/12/2014 2:50:41 PM	R17271
Surr: BFB	94.5	80.4-118		%REC	1	3/12/2014 2:50:41 PM	R17271
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	0.30	0.10		mg/L	1	3/11/2014 9:59:36 PM	R17244
Chloride	65	10		mg/L	20	3/11/2014 10:12:01 PM	R17244
Bromide	0.27	0.10		mg/L	1	3/11/2014 9:59:36 PM	R17244
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/11/2014 9:59:36 PM	R17244
Sulfate	170	10		mg/L	20	3/11/2014 10:12:01 PM	R17244
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/12/2014 4:19:48 AM	R17243
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.035	0.0020		mg/L	1	3/13/2014 1:06:44 PM	R17289
Cadmium	ND	0.0020		mg/L	1	3/13/2014 1:06:44 PM	R17289
Calcium	2.0	1.0		mg/L	1	3/13/2014 1:06:44 PM	R17289
Chromium	ND	0.0060		mg/L	1	3/13/2014 1:06:44 PM	R17289
Copper	ND	0.0060		mg/L	1	3/13/2014 1:06:44 PM	R17289
Iron	ND	0.020		mg/L	1	3/13/2014 1:06:44 PM	R17289
Magnesium	ND	1.0		mg/L	1	3/13/2014 1:06:44 PM	R17289
Manganese	0.0063	0.0020		mg/L	1	3/13/2014 1:06:44 PM	R17289
Potassium	ND	1.0		mg/L	1	3/13/2014 1:06:44 PM	R17289
Silver	ND	0.0050		mg/L	1	3/13/2014 1:06:44 PM	R17289
Sodium	320	5.0		mg/L	5	3/13/2014 1:08:41 PM	R17289
Zinc	0.012	0.010		mg/L	1	3/13/2014 1:06:44 PM	R17289
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.041	0.0020		mg/L	1	3/13/2014 4:54:04 PM	12123
Cadmium	ND	0.0020		mg/L	1	3/13/2014 4:54:04 PM	12123
Chromium	ND	0.0060		mg/L	1	3/13/2014 4:54:04 PM	12123
Copper	ND	0.0060		mg/L	1	3/13/2014 4:54:04 PM	12123
Iron	0.28	0.020		mg/L	1	3/13/2014 4:54:04 PM	12123
Manganese	0.020	0.0020		mg/L	1	3/13/2014 4:54:04 PM	12123
Silver	ND	0.0050		mg/L	1	3/13/2014 4:54:04 PM	12123
Zinc	0.010	0.010		mg/L	1	3/13/2014 4:54:04 PM	12123
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.0010		mg/L	1	3/19/2014 1:52:14 PM	R17423

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 12:38:00 PM
Lab ID: 1403307-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	3/18/2014 2:02:28 PM	R17401
Selenium	0.0039	0.0010		mg/L	1	3/19/2014 1:52:14 PM	R17423
Uranium	0.043	0.0010	*	mg/L	1	3/18/2014 2:02:28 PM	R17401
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0010		mg/L	1	3/17/2014 3:16:40 PM	12123
Lead	ND	0.0010		mg/L	1	3/17/2014 3:16:40 PM	12123
Selenium	0.0034	0.0010		mg/L	1	3/17/2014 3:16:40 PM	12123
Uranium	0.042	0.0050	*	mg/L	5	3/17/2014 4:41:31 PM	12123
EPA METHOD 245.1: MERCURY						Analyst:	**JML**
Mercury	ND	0.00020		mg/L	1	3/12/2014 12:35:10 PM	12133
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Toluene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Ethylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Methyl tert-butyl ether (MTBE)	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2,4-Trimethylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,3,5-Trimethylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2-Dichloroethane (EDC)	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2-Dibromoethane (EDB)	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Naphthalene	ND	2.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1-Methylnaphthalene	ND	4.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
2-Methylnaphthalene	ND	4.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Acetone	ND	10	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Bromobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Bromodichloromethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Bromoform	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Bromomethane	ND	3.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
2-Butanone	ND	10	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Carbon disulfide	ND	10	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Carbon Tetrachloride	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Chlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Chloroethane	ND	2.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Chloroform	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Chloromethane	ND	3.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
2-Chlorotoluene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
4-Chlorotoluene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
cis-1,2-DCE	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
cis-1,3-Dichloropropene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236

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

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 12:38:00 PM
Lab ID: 1403307-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Dibromochloromethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Dibromomethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2-Dichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,3-Dichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,4-Dichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Dichlorodifluoromethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1-Dichloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1-Dichloroethene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2-Dichloropropane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,3-Dichloropropane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
2,2-Dichloropropane	ND	2.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1-Dichloropropene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Hexachlorobutadiene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
2-Hexanone	ND	10	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Isopropylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
4-Isopropyltoluene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
4-Methyl-2-pentanone	ND	10	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Methylene Chloride	ND	3.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
n-Butylbenzene	ND	3.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
n-Propylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
sec-Butylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Styrene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
tert-Butylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1,1,2-Tetrachloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1,2,2-Tetrachloroethane	ND	2.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Tetrachloroethene (PCE)	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
trans-1,2-DCE	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
trans-1,3-Dichloropropene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2,3-Trichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2,4-Trichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1,1-Trichloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,1,2-Trichloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Trichloroethene (TCE)	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Trichlorofluoromethane	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
1,2,3-Trichloropropane	ND	2.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Vinyl chloride	ND	1.0	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Xylenes, Total	ND	1.5	p	µg/L	1	3/12/2014 3:00:01 AM	R17236
Surr: 1,2-Dichloroethane-d4	101	70-130	p	%REC	1	3/12/2014 3:00:01 AM	R17236

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 12:38:00 PM
Lab ID: 1403307-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	100	70-130	p	%REC	1	3/12/2014 3:00:01 AM	R17236
Surr: Dibromofluoromethane	99.1	70-130	p	%REC	1	3/12/2014 3:00:01 AM	R17236
Surr: Toluene-d8	102	70-130	p	%REC	1	3/12/2014 3:00:01 AM	R17236

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

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

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 1:25:00 PM
Lab ID: 1403307-002
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/12/2014 4:39:49 AM	12114
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/12/2014 4:39:49 AM	12114
Surr: DNOP	124	62.7-145		%REC	1	3/12/2014 4:39:49 AM	12114
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/12/2014 3:20:45 PM	R17271
Surr: BFB	104	80.4-118		%REC	1	3/12/2014 3:20:45 PM	R17271
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	0.20	0.10		mg/L	1	3/11/2014 10:24:25 PM	R17244
Chloride	1200	50		mg/L	100	3/17/2014 7:15:33 PM	R17389
Bromide	0.43	0.10		mg/L	1	3/11/2014 10:24:25 PM	R17244
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	3/11/2014 10:24:25 PM	R17244
Sulfate	190	10		mg/L	20	3/11/2014 10:36:50 PM	R17244
Nitrate+Nitrite as N	ND	1.0		mg/L	5	3/12/2014 4:32:12 AM	R17243
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.071	0.0020		mg/L	1	3/13/2014 1:10:25 PM	R17289
Cadmium	ND	0.0020		mg/L	1	3/13/2014 1:10:25 PM	R17289
Calcium	180	5.0		mg/L	5	3/13/2014 1:12:18 PM	R17289
Chromium	ND	0.0060		mg/L	1	3/13/2014 1:10:25 PM	R17289
Copper	ND	0.0060		mg/L	1	3/13/2014 1:10:25 PM	R17289
Iron	ND	0.020		mg/L	1	3/13/2014 1:10:25 PM	R17289
Magnesium	30	1.0		mg/L	1	3/13/2014 1:10:25 PM	R17289
Manganese	0.098	0.0020	*	mg/L	1	3/13/2014 1:10:25 PM	R17289
Potassium	2.1	1.0		mg/L	1	3/13/2014 1:10:25 PM	R17289
Silver	ND	0.0050		mg/L	1	3/13/2014 1:10:25 PM	R17289
Sodium	910	10		mg/L	10	3/14/2014 3:00:14 PM	R17335
Zinc	ND	0.010		mg/L	1	3/13/2014 1:10:25 PM	R17289
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.071	0.0020		mg/L	1	3/13/2014 5:04:46 PM	12123
Cadmium	ND	0.0020		mg/L	1	3/13/2014 5:04:46 PM	12123
Chromium	ND	0.0060		mg/L	1	3/13/2014 5:04:46 PM	12123
Copper	ND	0.0060		mg/L	1	3/13/2014 5:04:46 PM	12123
Iron	ND	0.020		mg/L	1	3/13/2014 5:04:46 PM	12123
Manganese	0.086	0.0020	*	mg/L	1	3/13/2014 5:04:46 PM	12123
Silver	ND	0.0050		mg/L	1	3/13/2014 5:04:46 PM	12123
Zinc	ND	0.010		mg/L	1	3/13/2014 5:04:46 PM	12123
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.0050		mg/L	5	3/19/2014 2:00:34 PM	R17423

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

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Lab ID: 1403307-002
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst:	**DBD**
Lead	ND	0.0010		mg/L	1	3/18/2014 2:16:42 PM	R17401
Selenium	0.0095	0.0050		mg/L	5	3/19/2014 2:00:34 PM	R17423
Uranium	0.057	0.0050	*	mg/L	5	3/19/2014 2:00:34 PM	R17423
200.8 ICPMS METALS:TOTAL						Analyst:	**DBD**
Arsenic	ND	0.0050		mg/L	5	3/17/2014 5:08:04 PM	12123
Lead	ND	0.0010		mg/L	1	3/17/2014 3:32:34 PM	12123
Selenium	0.012	0.0050		mg/L	5	3/17/2014 5:08:04 PM	12123
Uranium	0.060	0.0050	*	mg/L	5	3/17/2014 5:08:04 PM	12123
EPA METHOD 245.1: MERCURY						Analyst:	**JML**
Mercury	ND	0.00020		mg/L	1	3/12/2014 12:36:59 PM	12133
EPA METHOD 8260B: VOLATILES						Analyst:	**cadg**
Benzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Toluene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Ethylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Methyl tert-butyl ether (MTBE)	79	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2,4-Trimethylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,3,5-Trimethylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2-Dichloroethane (EDC)	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2-Dibromoethane (EDB)	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Naphthalene	ND	2.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1-Methylnaphthalene	ND	4.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
2-Methylnaphthalene	ND	4.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Acetone	ND	10	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Bromobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Bromodichloromethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Bromoform	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Bromomethane	ND	3.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
2-Butanone	ND	10	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Carbon disulfide	ND	10	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Carbon Tetrachloride	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Chlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Chloroethane	ND	2.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Chloroform	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Chloromethane	ND	3.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
2-Chlorotoluene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
4-Chlorotoluene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
cis-1,2-DCE	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
cis-1,3-Dichloropropene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236

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
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- O RSD is greater than RSDlimit
- P Sample pH greater than 2.
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 1:25:00 PM
Lab ID: 1403307-002
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromo-3-chloropropane	ND	2.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Dibromochloromethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Dibromomethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2-Dichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,3-Dichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,4-Dichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Dichlorodifluoromethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1-Dichloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1-Dichloroethene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2-Dichloropropane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,3-Dichloropropane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
2,2-Dichloropropane	ND	2.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1-Dichloropropene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Hexachlorobutadiene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
2-Hexanone	ND	10	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Isopropylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
4-Isopropyltoluene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
4-Methyl-2-pentanone	ND	10	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Methylene Chloride	ND	3.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
n-Butylbenzene	ND	3.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
n-Propylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
sec-Butylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Styrene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
tert-Butylbenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1,1,2-Tetrachloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1,2,2-Tetrachloroethane	ND	2.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Tetrachloroethene (PCE)	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
trans-1,2-DCE	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
trans-1,3-Dichloropropene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2,3-Trichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2,4-Trichlorobenzene	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1,1-Trichloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,1,2-Trichloroethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Trichloroethene (TCE)	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Trichlorofluoromethane	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
1,2,3-Trichloropropane	ND	2.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Vinyl chloride	ND	1.0	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Xylenes, Total	ND	1.5	p	µg/L	1	3/12/2014 3:28:40 AM	R17236
Surr: 1,2-Dichloroethane-d4	105	70-130	p	%REC	1	3/12/2014 3:28:40 AM	R17236

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 1:25:00 PM
Lab ID: 1403307-002
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Surr: 4-Bromofluorobenzene	98.9	70-130	p	%REC	1	3/12/2014 3:28:40 AM	R17236
Surr: Dibromofluoromethane	102	70-130	p	%REC	1	3/12/2014 3:28:40 AM	R17236
Surr: Toluene-d8	101	70-130	p	%REC	1	3/12/2014 3:28:40 AM	R17236

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-Group#4-
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 11:52:00 AM
Lab ID: 1403307-003 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Toluene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Ethylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Naphthalene	ND	2.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Acetone	ND	10		µg/L	1	3/12/2014 3:57:23 AM	R17236
Bromobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Bromoform	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Bromomethane	ND	3.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
2-Butanone	ND	10		µg/L	1	3/12/2014 3:57:23 AM	R17236
Carbon disulfide	ND	10		µg/L	1	3/12/2014 3:57:23 AM	R17236
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Chlorobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Chloroethane	ND	2.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Chloroform	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Chloromethane	ND	3.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Dibromomethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2014 3:57:23 AM	R17236

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-Group#4-
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 11:52:00 AM
Lab ID: 1403307-003
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
2-Hexanone	ND	10		µg/L	1	3/12/2014 3:57:23 AM	R17236
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2014 3:57:23 AM	R17236
Methylene Chloride	ND	3.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Styrene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Vinyl chloride	ND	1.0		µg/L	1	3/12/2014 3:57:23 AM	R17236
Xylenes, Total	ND	1.5		µg/L	1	3/12/2014 3:57:23 AM	R17236
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	3/12/2014 3:57:23 AM	R17236
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	1	3/12/2014 3:57:23 AM	R17236
Surr: Dibromofluoromethane	100	70-130		%REC	1	3/12/2014 3:57:23 AM	R17236
Surr: Toluene-d8	103	70-130		%REC	1	3/12/2014 3:57:23 AM	R17236

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: Q1-2014 Groundwater Sampling
Collection Date:
Lab ID: 1403307-004
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/12/2014 2:20:34 PM	R17271
Surr: BFB	90.0	80.4-118		%REC	1	3/12/2014 2:20:34 PM	R17271
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Toluene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Ethylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Naphthalene	ND	2.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Acetone	ND	10		µg/L	1	3/12/2014 4:26:01 AM	R17236
Bromobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Bromoform	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Bromomethane	ND	3.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
2-Butanone	ND	10		µg/L	1	3/12/2014 4:26:01 AM	R17236
Carbon disulfide	ND	10		µg/L	1	3/12/2014 4:26:01 AM	R17236
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Chlorobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Chloroethane	ND	2.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Chloroform	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Chloromethane	ND	3.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Dibromomethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: TRIP BLANK
Project: Q1-2014 Groundwater Sampling
Collection Date:
Lab ID: 1403307-004 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
2-Hexanone	ND	10		µg/L	1	3/12/2014 4:26:01 AM	R17236
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2014 4:26:01 AM	R17236
Methylene Chloride	ND	3.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Styrene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Vinyl chloride	ND	1.0		µg/L	1	3/12/2014 4:26:01 AM	R17236
Xylenes, Total	ND	1.5		µg/L	1	3/12/2014 4:26:01 AM	R17236
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	3/12/2014 4:26:01 AM	R17236
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	1	3/12/2014 4:26:01 AM	R17236
Surr: Dibromofluoromethane	96.3	70-130		%REC	1	3/12/2014 4:26:01 AM	R17236
Surr: Toluene-d8	99.8	70-130		%REC	1	3/12/2014 4:26:01 AM	R17236

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498058** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498059** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.9	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.4	85	115			
Calcium	50	1.0	50.00	0	101	85	115			
Chromium	0.48	0.0060	0.5000	0	96.2	85	115			
Copper	0.48	0.0060	0.5000	0	96.5	85	115			
Iron	0.48	0.020	0.5000	0	95.5	85	115			
Magnesium	51	1.0	50.00	0	103	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Potassium	50	1.0	50.00	0	100	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Sodium	51	1.0	50.00	0	101	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **1403420-008AMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	3.7	0.050	2.500	1.186	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403420-008AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17289**		RunNo:	**17289**				
Prep Date:		Analysis Date:	**3/13/2014**		SeqNo:	**498100**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	3.7	0.050	2.500	1.186	99.3	70	130	1.98	20	

Sample ID	**1403477-001BMS**	SampType:	**MS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17289**		RunNo:	**17289**				
Prep Date:		Analysis Date:	**3/13/2014**		SeqNo:	**498102**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.55	0.020	0.5000	0.1063	88.6	70	130			
Magnesium	59	1.0	50.00	7.323	103	70	130			

Sample ID	**1403477-001BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17289**		RunNo:	**17289**				
Prep Date:		Analysis Date:	**3/13/2014**		SeqNo:	**498103**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.57	0.020	0.5000	0.1063	92.0	70	130	3.10	20	
Magnesium	59	1.0	50.00	7.323	104	70	130	0.629	20	

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17335**		RunNo:	**17335**				
Prep Date:		Analysis Date:	**3/14/2014**		SeqNo:	**499202**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17335**		RunNo:	**17335**				
Prep Date:		Analysis Date:	**3/14/2014**		SeqNo:	**499203**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	50	1.0	50.00	0	99.5	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **1403307-002DMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **OW-10**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498216** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.07097	99.3	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.7	70	130			
Chromium	0.49	0.0060	0.5000	0	97.9	70	130			
Copper	0.51	0.0060	0.5000	0	101	70	130			
Iron	0.53	0.020	0.5000	0	106	70	130			
Manganese	0.58	0.0020	0.5000	0.08615	99.0	70	130			
Silver	0.094	0.0050	0.1000	0	94.4	70	130			
Zinc	0.51	0.010	0.5000	0	102	70	130			

Sample ID **1403307-002DMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **OW-10**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498217** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.07097	99.2	70	130	0.104	20	
Cadmium	0.49	0.0020	0.5000	0	97.2	70	130	0.507	20	
Chromium	0.48	0.0060	0.5000	0	96.6	70	130	1.24	20	
Copper	0.51	0.0060	0.5000	0	101	70	130	0.0316	20	
Iron	0.53	0.020	0.5000	0	105	70	130	0.220	20	
Manganese	0.58	0.0020	0.5000	0.08615	98.7	70	130	0.250	20	
Silver	0.091	0.0050	0.1000	0	90.8	70	130	3.86	20	
Zinc	0.50	0.010	0.5000	0	101	70	130	0.940	20	

Sample ID **1403354-001DMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498233** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.64	0.0020	0.5000	0.1369	101	70	130			
Cadmium	0.50	0.0020	0.5000	0	99.1	70	130			
Chromium	0.49	0.0060	0.5000	0	98.1	70	130			
Copper	0.52	0.0060	0.5000	0	103	70	130			
Iron	0.89	0.020	0.5000	0.2846	121	70	130			
Manganese	0.62	0.0020	0.5000	0.09476	105	70	130			
Silver	0.096	0.0050	0.1000	0	96.0	70	130			
Zinc	0.52	0.010	0.5000	0.01156	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **1403354-001DMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498234** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.63	0.0020	0.5000	0.1369	98.2	70	130	2.12	20	
Cadmium	0.48	0.0020	0.5000	0	97.0	70	130	2.18	20	
Chromium	0.49	0.0060	0.5000	0	97.3	70	130	0.895	20	
Copper	0.50	0.0060	0.5000	0	101	70	130	2.22	20	
Iron	0.88	0.020	0.5000	0.2846	120	70	130	0.786	20	
Manganese	0.59	0.0020	0.5000	0.09476	99.5	70	130	4.36	20	
Silver	0.095	0.0050	0.1000	0	94.6	70	130	1.46	20	
Zinc	0.52	0.010	0.5000	0.01156	101	70	130	0.729	20	

Sample ID **MB-12123**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498282** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-12123**	SampType: **LCS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498283** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	99.0	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	98.3	85	115			
Iron	0.53	0.020	0.5000	0	106	85	115			
Manganese	0.50	0.0020	0.5000	0	99.2	85	115			
Silver	0.098	0.0050	0.1000	0	98.2	85	115			
Zinc	0.51	0.010	0.5000	0	103	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403420-008AMS**	SampType:	**MS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501189**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.026	0.0010	0.02500	0.0003984	104	70	130			

Sample ID	**1403420-008AMSD**	SampType:	**MSD**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501190**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0003984	105	70	130	0.894	20	

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501192**	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	102	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501193**	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	101	85	115			
Uranium	0.028	0.0010	0.02500	0	110	85	115			

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501194**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501195**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403273-002AMS**	SampType:	**MS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**501959**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.12	0.0050	0.1250	0.003578	94.3	70	130			

Sample ID	**1403420-008AMS**	SampType:	**MS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**501996**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.0009073	101	70	130			
Selenium	0.13	0.0050	0.1250	0.001602	99.9	70	130			

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**502016**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.7	85	115			
Selenium	0.024	0.0010	0.02500	0	97.2	85	115			
Uranium	0.025	0.0010	0.02500	0	98.9	85	115			

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**502017**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.1	85	115			
Selenium	0.024	0.0010	0.02500	0	97.2	85	115			
Uranium	0.025	0.0010	0.02500	0	99.8	85	115			

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**502018**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17423**	RunNo: **17423**
Prep Date:	Analysis Date: **3/19/2014**	SeqNo: **502019** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **1403307-001DMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **OW-1** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500678** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.071	0.0050	0.02500	0.04223	114	70	130	2.87	20	

Sample ID **1403307-001DMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **OW-1** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500679** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0.0009814	98.2	70	130	0.481	20	
Lead	0.026	0.0010	0.02500	0.0005163	101	70	130	1.78	20	
Selenium	0.026	0.0010	0.02500	0.003365	91.7	70	130	2.65	20	

Sample ID **1403307-001DMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **OW-1** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500680** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.069	0.0050	0.02500	0.04223	106	70	130			

Sample ID **1403307-001DMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **OW-1** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500681** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0.0009814	97.8	70	130			
Lead	0.025	0.0010	0.02500	0.0005163	99.5	70	130			
Selenium	0.026	0.0010	0.02500	0.003365	88.9	70	130			

Sample ID **1403358-001BMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **BatchQC** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500694** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0.001050	96.7	70	130			
Lead	0.026	0.0010	0.02500	0	102	70	130			
Selenium	0.023	0.0010	0.02500	0.0008009	87.6	70	130			
Uranium	0.045	0.0010	0.02500	0.01755	110	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**LLLCS-12123**	SampType:	**LCSLL**	TestCode:	**200.8 ICPMS Metals:Total**
Client ID:	**BatchQC**	Batch ID:	**12123**	RunNo:	**17381**
Prep Date:	**3/11/2014**	Analysis Date:	**3/17/2014**	SeqNo:	**500705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.2	85	115			
Lead	0.025	0.0010	0.02500	0	98.9	85	115			
Selenium	0.023	0.0010	0.02500	0	91.4	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	**MB-12123**	SampType:	**MBLK**	TestCode:	**200.8 ICPMS Metals:Total**
Client ID:	**PBW**	Batch ID:	**12123**	RunNo:	**17381**
Prep Date:	**3/11/2014**	Analysis Date:	**3/17/2014**	SeqNo:	**500708** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**MB-12133**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496787**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-12133**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**LCSW**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496788**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	106	80	120			

Sample ID	**1403329-004AMS**	SampType:	**MS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496797**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	107	75	125			

Sample ID	**1403329-004AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496798**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	107	75	125	0.541	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBW**	Batch ID: **R17243**	RunNo: **17243**							
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496494**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSW**	Batch ID: **R17243**	RunNo: **17243**							
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496495**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	101	90	110			

Sample ID **1403370-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **R17243**	RunNo: **17243**							
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496500**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	4.0	0.20	3.500	0.4951	100	90	110			

Sample ID **1403370-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **R17243**	RunNo: **17243**							
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496501**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	4.0	0.20	3.500	0.4951	100	90	110	0.0200	20	

Sample ID **1403371-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **R17243**	RunNo: **17243**							
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496503**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0.1383	99.0	90	110			

Sample ID **1403371-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **BatchQC**	Batch ID: **R17243**	RunNo: **17243**							
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496504**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0.1383	98.7	90	110	0.270	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496579** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS-b**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496581** 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	93.6	90	110			
Bromide	2.4	0.10	2.500	0	95.6	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	95.2	90	110			
Sulfate	9.5	0.50	10.00	0	94.7	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496606** 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								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.6	90	110			
Chloride	4.8	0.50	5.000	0	95.0	90	110			
Bromide	2.4	0.10	2.500	0	97.1	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	97.0	90	110			
Sulfate	9.5	0.50	10.00	0	95.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403297-002AMS**	SampType:	**MS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**R17244**		RunNo:	**17244**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496609**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.1	0.10	0.5000	0.7030	87.8	76.4	109			
Bromide	2.3	0.10	2.500	0	93.1	85.9	111			

Sample ID	**1403297-002AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**R17244**		RunNo:	**17244**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496610**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	1.2	0.10	0.5000	0.7030	92.6	76.4	109	2.09	20	
Bromide	2.4	0.10	2.500	0	94.5	85.9	111	1.52	20	

Sample ID	**1403302-001AMS**	SampType:	**MS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**R17244**		RunNo:	**17244**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496616**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.97	0.10	0.5000	0.5027	92.9	76.4	109			
Bromide	2.3	0.10	2.500	0	93.2	85.9	111			
Sulfate	50	0.50	10.00	39.40	103	82.3	125			

Sample ID	**1403302-001AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**R17244**		RunNo:	**17244**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496617**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.97	0.10	0.5000	0.5027	93.1	76.4	109	0.0930	20	
Bromide	2.3	0.10	2.500	0	92.9	85.9	111	0.292	20	
Sulfate	50	0.50	10.00	39.40	103	82.3	125	0.134	20	

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSW**	Batch ID:	**R17389**		RunNo:	**17389**				
Prep Date:		Analysis Date:	**3/17/2014**		SeqNo:	**500826**	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	97.8	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB-12114**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW**	Batch ID: **12114**	RunNo: **17227**
Prep Date: **3/11/2014**	Analysis Date: **3/12/2014**	SeqNo: **496413** 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	1.0		1.000		99.8	62.7	145			

Sample ID **LCSD-12114**	SampType: **LCSD**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSS02**	Batch ID: **12114**	RunNo: **17227**
Prep Date: **3/11/2014**	Analysis Date: **3/12/2014**	SeqNo: **496415** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.6	1.0	5.000	0	112	78.6	146	34.2	26.5	R
Surr: DNOP	0.62		0.5000		123	62.7	145	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **R17271**	RunNo: **17271**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497471** 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	19		20.00		95.6	80.4	118			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **R17271**	RunNo: **17271**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497473** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	91.1	80	120			
Surr: BFB	21		20.00		104	80.4	118			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**
21-Mar-14

Client: Western Refining Southwest, Gallup
Project: Q1-2014 Groundwater Sampling

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R17236**	RunNo: **17236**	
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496213**	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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17236**	RunNo: **17236**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496213** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.9	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID **100ng lcs1**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17236**	RunNo: **17236**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496215** 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	20	1.0	20.00	0	102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403307**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **100ng lcs1**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17236**	RunNo: **17236**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496215** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	114	90	143			
Trichloroethene (TCE)	20	1.0	20.00	0	98.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	9.3		10.00		93.2	70	130			

Sample ID **1403264-005a ms**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **R17236**	RunNo: **17236**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496218** 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	106	67.5	123			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	118	81.9	134			
Trichloroethene (TCE)	19	1.0	20.00	0	95.6	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130			
Surr: Toluene-d8	9.8		10.00		98.4	70	130			

Sample ID **1403264-005a msd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **R17236**	RunNo: **17236**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496219** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130	3.09	20	
Toluene	20	1.0	20.00	0	100	67.5	123	5.87	20	
Chlorobenzene	20	1.0	20.00	0	98.6	70	130	4.78	20	
1,1-Dichloroethene	22	1.0	20.00	0	108	81.9	134	8.53	20	
Trichloroethene (TCE)	19	1.0	20.00	0	93.9	70	130	1.89	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.7		10.00		96.6	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		102	70	130	0	0	
Surr: Toluene-d8	9.5		10.00		95.1	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1403307 RcptNo: 1

Received by/date: 03/07/14

Logged By: **Lindsay Mangin** 3/7/2014 5:00:00 PM

Completed By: **Lindsay Mangin** 3/10/2014 8:08:38 AM

Reviewed By: mg 03/11/14

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: 4 (<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Not Present			

Chain-of-Custody Record

Client: Western Refining

Mailing Address: Rt 3 Box 7
Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-722-0210

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

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name: Q1-2014 Groundwater Sampling

Project #: Quarterly Sampling

Project Manager: Cheryl Johnson

Sampler:
On Ice: ☒ Yes ☐ No
Sample Temperature: 3.8

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1403307	Analysis Request: 8015B (DRO/GRO)	WQCC Metals (Total and Dissolved)		Air Bubbles (Y or N)
3/7/14	1238	GW	OW-1	VARIOUS	VARIOUS	-001	x	x	x	x	
3/7/14	1325	GW	OW-10	1	1	-002	x	x	x	x	
3/7/14	1152	W	FB-Group#4-	1	1	-003	x				
			Trip Blank 03/11/14		HCl 3/12/14	-004					

Date	Time	Relinquished by:	Received by:	Date	Time	Remarks:
3/7/14	1700	Tom Aleem	Ashley Gallegos	03/07/14	1700	
Date:	Time:	Relinquished by:	Received by:	Date	Time	

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 05, 2014

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q4 2014 OrderNo.: 1411397

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/11/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q4 2014
Collection Date: 11/10/2014 11:10:00 AM
Lab ID: 1411397-001 **Matrix:** AQUEOUS **Received Date:** 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/14/2014 9:57:05 PM	16356
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/14/2014 9:57:05 PM	16356
Surr: DNOP	79.0	59-141		%REC	1	11/14/2014 9:57:05 PM	16356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/12/2014 1:14:07 PM	R22501
Surr: BFB	90.4	80-120		%REC	1	11/12/2014 1:14:07 PM	R22501
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	0.30	0.10		mg/L	1	11/12/2014 1:26:24 AM	R22483
Chloride	72	10		mg/L	20	11/12/2014 1:38:49 AM	R22483
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	11/12/2014 1:26:24 AM	R22483
Bromide	0.27	0.10		mg/L	1	11/12/2014 1:26:24 AM	R22483
Nitrogen, Nitrate (As N)	0.30	0.10		mg/L	1	11/12/2014 1:26:24 AM	R22483
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/12/2014 1:26:24 AM	R22483
Sulfate	170	10		mg/L	20	11/12/2014 1:38:49 AM	R22483
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Barium	0.033	0.0020		mg/L	1	11/12/2014 5:35:23 PM	R22496
Cadmium	ND	0.0020		mg/L	1	11/12/2014 5:35:23 PM	R22496
Calcium	2.1	1.0		mg/L	1	11/12/2014 5:35:23 PM	R22496
Chromium	ND	0.0060		mg/L	1	11/12/2014 5:35:23 PM	R22496
Copper	ND	0.0060		mg/L	1	11/12/2014 5:35:23 PM	R22496
Iron	0.048	0.020		mg/L	1	11/12/2014 5:35:23 PM	R22496
Magnesium	ND	1.0		mg/L	1	11/12/2014 5:35:23 PM	R22496
Manganese	ND	0.0020		mg/L	1	11/12/2014 5:35:23 PM	R22496
Potassium	ND	1.0		mg/L	1	11/12/2014 5:35:23 PM	R22496
Silver	ND	0.0050		mg/L	1	11/12/2014 5:35:23 PM	R22496
Sodium	310	5.0		mg/L	5	11/12/2014 5:37:18 PM	R22496
Zinc	0.031	0.010		mg/L	1	11/12/2014 5:35:23 PM	R22496
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.036	0.0020		mg/L	1	11/16/2014 6:07:03 PM	16396
Cadmium	ND	0.0020		mg/L	1	11/16/2014 6:07:03 PM	16396
Chromium	ND	0.0060		mg/L	1	11/16/2014 6:07:03 PM	16396
Copper	ND	0.0060		mg/L	1	11/16/2014 6:07:03 PM	16396
Iron	0.27	0.020		mg/L	1	11/16/2014 6:07:03 PM	16396
Manganese	0.0067	0.0020		mg/L	1	11/16/2014 6:07:03 PM	16396
Silver	ND	0.0050		mg/L	1	11/16/2014 6:07:03 PM	16396
Zinc	ND	0.010		mg/L	1	11/16/2014 6:07:03 PM	16396
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q4 2014
Collection Date: 11/10/2014 11:10:00 AM
Lab ID: 1411397-001
Matrix: AQUEOUS
Received Date: 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.0013	0.0010		mg/L	1	11/17/2014 3:19:43 PM	R22589
Lead	ND	0.020		mg/L	20	11/24/2014 6:16:03 PM	R22774
Selenium	0.0037	0.0010		mg/L	1	11/17/2014 3:19:43 PM	R22589
Uranium	0.038	0.020	*	mg/L	20	11/24/2014 6:16:03 PM	R22774
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	ND	0.0010		mg/L	1	11/18/2014 4:48:58 PM	16396
Lead	ND	0.0010		mg/L	1	11/18/2014 4:48:58 PM	16396
Selenium	0.0029	0.0010		mg/L	1	11/18/2014 4:48:58 PM	16396
Uranium	0.043	0.0010	*	mg/L	1	11/18/2014 4:48:58 PM	16396
EPA METHOD 245.1: MERCURY						Analyst: **JLF**	
Mercury	ND	0.00020		mg/L	1	11/19/2014 12:38:19 PM	16435
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Toluene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Ethylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Naphthalene	ND	2.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Acetone	ND	10		µg/L	1	11/12/2014 9:29:05 PM	R22502
Bromobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Bromoform	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Bromomethane	ND	3.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
2-Butanone	ND	10		µg/L	1	11/12/2014 9:29:05 PM	R22502
Carbon disulfide	ND	10		µg/L	1	11/12/2014 9:29:05 PM	R22502
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Chlorobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Chloroethane	ND	2.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Chloroform	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Chloromethane	ND	3.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q4 2014
Collection Date: 11/10/2014 11:10:00 AM
Lab ID: 1411397-001 **Matrix:** AQUEOUS **Received Date:** 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Dibromomethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1-Dichloroethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1-Dichloroethene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
2-Hexanone	ND	10		µg/L	1	11/12/2014 9:29:05 PM	R22502
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2014 9:29:05 PM	R22502
Methylene Chloride	ND	3.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Styrene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Vinyl chloride	ND	1.0		µg/L	1	11/12/2014 9:29:05 PM	R22502
Xylenes, Total	ND	1.5		µg/L	1	11/12/2014 9:29:05 PM	R22502

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-1
Project: Q4 2014
Collection Date: 11/10/2014 11:10:00 AM
Lab ID: 1411397-001
Matrix: AQUEOUS
Received Date: 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%REC	1	11/12/2014 9:29:05 PM	R22502
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	1	11/12/2014 9:29:05 PM	R22502
Surr: Dibromofluoromethane	106	70-130		%REC	1	11/12/2014 9:29:05 PM	R22502
Surr: Toluene-d8	89.5	70-130		%REC	1	11/12/2014 9:29:05 PM	R22502

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q4 2014
Collection Date: 11/10/2014 2:24:00 PM
Lab ID: 1411397-002
Matrix: AQUEOUS
Received Date: 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/14/2014 11:01:42 PM	16356
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/14/2014 11:01:42 PM	16356
Surr: DNOP	98.5	59-141		%REC	1	11/14/2014 11:01:42 PM	16356
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	0.087	0.050		mg/L	1	11/12/2014 1:41:23 PM	R22501
Surr: BFB	90.9	80-120		%REC	1	11/12/2014 1:41:23 PM	R22501
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	0.20	0.10		mg/L	1	11/12/2014 1:51:13 AM	R22483
Chloride	1600	50		mg/L	100	11/18/2014 3:40:21 PM	R22624
Nitrogen, Nitrite (As N)	ND	2.0		mg/L	20	11/12/2014 2:03:38 AM	R22483
Bromide	0.69	0.10		mg/L	1	11/12/2014 1:51:13 AM	R22483
Nitrogen, Nitrate (As N)	0.22	0.10		mg/L	1	11/12/2014 1:51:13 AM	R22483
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/12/2014 1:51:13 AM	R22483
Sulfate	200	10		mg/L	20	11/12/2014 2:03:38 AM	R22483
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Barium	0.039	0.0020		mg/L	1	11/12/2014 5:39:00 PM	R22496
Cadmium	ND	0.0020		mg/L	1	11/12/2014 5:39:00 PM	R22496
Calcium	39	1.0		mg/L	1	11/12/2014 5:39:00 PM	R22496
Chromium	ND	0.0060		mg/L	1	11/12/2014 5:39:00 PM	R22496
Copper	ND	0.0060		mg/L	1	11/12/2014 5:39:00 PM	R22496
Iron	ND	0.020		mg/L	1	11/12/2014 5:39:00 PM	R22496
Magnesium	5.3	1.0		mg/L	1	11/12/2014 5:39:00 PM	R22496
Manganese	0.0099	0.0020		mg/L	1	11/12/2014 5:39:00 PM	R22496
Potassium	1.1	1.0		mg/L	1	11/12/2014 5:39:00 PM	R22496
Silver	ND	0.0050		mg/L	1	11/12/2014 5:39:00 PM	R22496
Sodium	430	5.0		mg/L	5	11/12/2014 5:44:48 PM	R22496
Zinc	0.038	0.010		mg/L	1	11/12/2014 5:39:00 PM	R22496
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.082	0.0020		mg/L	1	11/16/2014 6:10:47 PM	16396
Cadmium	ND	0.0020		mg/L	1	11/16/2014 6:10:47 PM	16396
Chromium	ND	0.0060		mg/L	1	11/16/2014 6:10:47 PM	16396
Copper	ND	0.0060		mg/L	1	11/16/2014 6:10:47 PM	16396
Iron	ND	0.020		mg/L	1	11/16/2014 6:10:47 PM	16396
Manganese	0.18	0.0020	*	mg/L	1	11/16/2014 6:10:47 PM	16396
Silver	ND	0.0050		mg/L	1	11/16/2014 6:10:47 PM	16396
Zinc	ND	0.010		mg/L	1	11/16/2014 6:10:47 PM	16396
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q4 2014
Collection Date: 11/10/2014 2:24:00 PM
Lab ID: 1411397-002
Matrix: AQUEOUS
Received Date: 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.010		mg/L	10	11/24/2014 4:30:41 PM	R22774
Lead	ND	0.010		mg/L	10	11/24/2014 4:30:41 PM	R22774
Selenium	0.013	0.010		mg/L	10	11/24/2014 4:30:41 PM	R22774
Uranium	0.057	0.010	*	mg/L	10	11/24/2014 4:30:41 PM	R22774
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	ND	0.0050		mg/L	5	11/20/2014 12:47:22 PM	16396
Lead	ND	0.0010		mg/L	1	11/18/2014 4:52:28 PM	16396
Selenium	ND	0.020		mg/L	20	11/20/2014 1:19:29 PM	16396
Uranium	0.066	0.0050	*	mg/L	5	11/20/2014 12:47:22 PM	16396
EPA METHOD 245.1: MERCURY						Analyst: **JLF**	
Mercury	ND	0.00020		mg/L	1	11/19/2014 12:40:08 PM	16435
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Toluene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Ethylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Methyl tert-butyl ether (MTBE)	98	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Naphthalene	ND	2.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
2-Methylnaphthalene	ND	4.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Acetone	ND	10		µg/L	1	11/12/2014 11:28:09 PM	R22502
Bromobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Bromodichloromethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Bromoform	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Bromomethane	ND	3.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
2-Butanone	ND	10		µg/L	1	11/12/2014 11:28:09 PM	R22502
Carbon disulfide	ND	10		µg/L	1	11/12/2014 11:28:09 PM	R22502
Carbon Tetrachloride	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Chlorobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Chloroethane	ND	2.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Chloroform	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Chloromethane	ND	3.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
2-Chlorotoluene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
4-Chlorotoluene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
cis-1,2-DCE	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q4 2014
Collection Date: 11/10/2014 2:24:00 PM
Lab ID: 1411397-002
Matrix: AQUEOUS
Received Date: 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Dibromochloromethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Dibromomethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1-Dichloroethane	1.3	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1-Dichloroethene	1.7	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2-Dichloropropane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,3-Dichloropropane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
2,2-Dichloropropane	ND	2.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1-Dichloropropene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Hexachlorobutadiene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
2-Hexanone	ND	10		µg/L	1	11/12/2014 11:28:09 PM	R22502
Isopropylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
4-Isopropyltoluene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
4-Methyl-2-pentanone	ND	10		µg/L	1	11/12/2014 11:28:09 PM	R22502
Methylene Chloride	ND	3.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
n-Butylbenzene	ND	3.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
n-Propylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
sec-Butylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Styrene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
tert-Butylbenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
trans-1,2-DCE	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Trichlorofluoromethane	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Vinyl chloride	ND	1.0		µg/L	1	11/12/2014 11:28:09 PM	R22502
Xylenes, Total	ND	1.5		µg/L	1	11/12/2014 11:28:09 PM	R22502

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

Qualifiers:

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

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-10
Project: Q4 2014
Collection Date: 11/10/2014 2:24:00 PM
Lab ID: 1411397-002
Matrix: AQUEOUS
Received Date: 11/11/2014 4:23:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%REC	1	11/12/2014 11:28:09 PM	R22502
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	1	11/12/2014 11:28:09 PM	R22502
Surr: Dibromofluoromethane	100	70-130		%REC	1	11/12/2014 11:28:09 PM	R22502
Surr: Toluene-d8	97.2	70-130		%REC	1	11/12/2014 11:28:09 PM	R22502

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22496**	RunNo: **22496**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663366** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22496**	RunNo: **22496**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663367** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	96.6	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.3	85	115			
Calcium	50	1.0	50.00	0	101	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.47	0.0060	0.5000	0	94.2	85	115			
Iron	0.48	0.020	0.5000	0	95.5	85	115			
Magnesium	50	1.0	50.00	0	99.8	85	115			
Manganese	0.46	0.0020	0.5000	0	92.3	85	115			
Potassium	48	1.0	50.00	0	95.0	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Sodium	49	1.0	50.00	0	97.5	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **1411397-002FMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **OW-10**	Batch ID: **R22496**	RunNo: **22496**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663680** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.52	0.0020	0.5000	0.03905	95.8	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.7	70	130			
Calcium	87	1.0	50.00	39.46	95.6	70	130			
Chromium	0.48	0.0060	0.5000	0	96.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**1411397-002FMS**	SampType:	**MS**	TestCode:	**EPA Method 200.7: Dissolved Metals**
Client ID:	**OW-10**	Batch ID:	**R22496**	RunNo:	**22496**
Prep Date:		Analysis Date:	**11/12/2014**	SeqNo:	**663680** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.53	0.0060	0.5000	0	106	70	130			
Iron	0.48	0.020	0.5000	0	96.0	70	130			
Magnesium	55	1.0	50.00	5.278	100	70	130			
Manganese	0.47	0.0020	0.5000	0.009920	92.6	70	130			
Potassium	49	1.0	50.00	1.055	96.5	70	130			
Silver	0.096	0.0050	0.1000	0	95.5	70	130			
Zinc	0.53	0.010	0.5000	0.03754	97.6	70	130			

Sample ID	**1411397-002FMSD**	SampType:	**MSD**	TestCode:	**EPA Method 200.7: Dissolved Metals**
Client ID:	**OW-10**	Batch ID:	**R22496**	RunNo:	**22496**
Prep Date:		Analysis Date:	**11/12/2014**	SeqNo:	**663681** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.52	0.0020	0.5000	0.03905	95.3	70	130	0.530	20	
Cadmium	0.48	0.0020	0.5000	0	96.2	70	130	1.60	20	
Calcium	86	1.0	50.00	39.46	93.9	70	130	0.969	20	
Chromium	0.48	0.0060	0.5000	0	96.3	70	130	0.377	20	
Copper	0.52	0.0060	0.5000	0	105	70	130	1.04	20	
Iron	0.47	0.020	0.5000	0	94.8	70	130	1.26	20	
Magnesium	55	1.0	50.00	5.278	100	70	130	0.163	20	
Manganese	0.47	0.0020	0.5000	0.009920	92.1	70	130	0.585	20	
Potassium	49	1.0	50.00	1.055	96.7	70	130	0.186	20	
Silver	0.097	0.0050	0.1000	0	97.2	70	130	1.80	20	
Zinc	0.53	0.010	0.5000	0.03754	98.0	70	130	0.338	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**MB-16396**	SampType:	**MBLK**	TestCode:	**EPA Method 200.7: Total Metals**					
Client ID:	**PBW**	Batch ID:	**16396**	RunNo:	**22599**					
Prep Date:	**11/14/2014**	Analysis Date:	**11/16/2014**	SeqNo:	**666155**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	**LCS-16396**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Total Metals**					
Client ID:	**LCSW**	Batch ID:	**16396**	RunNo:	**22599**					
Prep Date:	**11/14/2014**	Analysis Date:	**11/16/2014**	SeqNo:	**666156**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	98.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.48	0.0060	0.5000	0	96.9	85	115			
Copper	0.49	0.0060	0.5000	0	98.0	85	115			
Iron	0.48	0.020	0.5000	0	96.3	85	115			
Manganese	0.47	0.0020	0.5000	0	94.3	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.50	0.010	0.5000	0	99.6	85	115			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22589**	RunNo: **22589**
Prep Date:	Analysis Date: **11/17/2014**	SeqNo: **665959** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.0	85	115			
Selenium	0.023	0.0010	0.02500	0	93.9	85	115			

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22589**	RunNo: **22589**
Prep Date:	Analysis Date: **11/17/2014**	SeqNo: **665960** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	101	85	115			
Selenium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22589**	RunNo: **22589**
Prep Date:	Analysis Date: **11/17/2014**	SeqNo: **665963** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22589**	RunNo: **22589**
Prep Date:	Analysis Date: **11/17/2014**	SeqNo: **665964** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22774**	RunNo: **22774**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **672122** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	92.5	85	115			
Lead	0.024	0.0010	0.02500	0	94.4	85	115			
Selenium	0.022	0.0010	0.02500	0	89.7	85	115			
Uranium	0.024	0.0010	0.02500	0	95.2	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22774**	RunNo: **22774**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **672123** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.3	85	115			
Lead	0.024	0.0010	0.02500	0	97.3	85	115			
Selenium	0.024	0.0010	0.02500	0	95.2	85	115			
Uranium	0.024	0.0010	0.02500	0	94.8	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22774**	RunNo: **22774**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **672124** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22774**	RunNo: **22774**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **672125** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**LLLCS-16396**	SampType:	**LCSLL**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**BatchQC**	Batch ID:	**16396**		RunNo:	**22609**				
Prep Date:	**11/14/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666764**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.6	85	115			
Lead	0.026	0.0010	0.02500	0	103	85	115			
Selenium	0.023	0.0010	0.02500	0	93.2	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	**MB-16396**	SampType:	**MBLK**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**PBW**	Batch ID:	**16396**		RunNo:	**22609**				
Prep Date:	**11/14/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666766**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**MB-16435**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**				
Client ID:	**PBW**	Batch ID:	**16435**	RunNo:	**22633**				
Prep Date:	**11/18/2014**	Analysis Date:	**11/19/2014**	SeqNo:	**667607**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-16435**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**				
Client ID:	**LCSW**	Batch ID:	**16435**	RunNo:	**22633**				
Prep Date:	**11/18/2014**	Analysis Date:	**11/19/2014**	SeqNo:	**667608**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	107	80	120			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22483**	RunNo: **22483**
Prep Date:	Analysis Date: **11/11/2014**	SeqNo: **662860** 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								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22483**	RunNo: **22483**
Prep Date:	Analysis Date: **11/11/2014**	SeqNo: **662861** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	101	90	110			
Chloride	4.8	0.50	5.000	0	96.7	90	110			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	96.7	90	110			
Bromide	2.5	0.10	2.500	0	98.5	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.0	90	110			
Sulfate	9.9	0.50	10.00	0	99.4	90	110			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB-16356**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **PBW**	Batch ID: **16356**	RunNo: **22538**
Prep Date: **11/12/2014**	Analysis Date: **11/14/2014**	SeqNo: **665412** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.2		1.000		122	59	141			

Sample ID **LCS-16356**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range**
Client ID: **LCSW**	Batch ID: **16356**	RunNo: **22538**
Prep Date: **11/12/2014**	Analysis Date: **11/14/2014**	SeqNo: **665425** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	121	69.7	142			
Surr: DNOP	0.73		0.5000		145	59	141			S

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**5ML RB**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBW**	Batch ID:	**R22501**		RunNo:	**22501**				
Prep Date:		Analysis Date:	**11/12/2014**		SeqNo:	**663458**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	18		20.00		90.3	80	120			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSW**	Batch ID:	**R22501**		RunNo:	**22501**				
Prep Date:		Analysis Date:	**11/12/2014**		SeqNo:	**663459**	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	91.3	80	120			
Surr: BFB	19		20.00		92.7	80	120			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22502**	RunNo: **22502**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663504** 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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22502**	RunNo: **22502**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663504** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.3	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		99.6	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R22502**	RunNo: **22502**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663506** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	22	1.0	20.00	0	112	80	120			
Chlorobenzene	20	1.0	20.00	0	101	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411397**

05-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R22502**	RunNo: **22502**
Prep Date:	Analysis Date: **11/12/2014**	SeqNo: **663506** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	117	82.6	131			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.5		10.00		95.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

ENVIRONMENTAL ANALYSIS LABORATORY

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: 1411397 RcptNo: 1

Received by/date: CS 11/11/14

Logged By: **Celina Sessa** 11/11/2014 4:23:00 PM Celina Sessa

Completed By: **Celina Sessa** 11/11/2014 4:38:35 PM Celina Sessa

Reviewed By: CS 11/11/14

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: 4 (<2 or >12 unless noted)

Adjusted? —

Checked by: AT 11/12/14

Special Handling (if applicable)

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

Person Notified: ____ Date ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

17. Additional remarks:

18. **Cooler Information**

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

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address: 92 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

Q4 2014

Project #:

OW-1,-10

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0 °C

HALL ENVIRONME ANALYSIS LABOR

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. 1411397	8260 + MTBE	8015B extended	WQCC Metals - total	WQCC Metals - dissolved (filtered)	Major cations/anions
		GS	11/4/14								
11-10-14	1110	Aq	OW-1	10		-001	X	X	X	X	X
11-10-14	1424	↓	OW-10	10		-002	X	X	X	X	X
~~11-10-14~~			TB-111014	3			X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-11-14	1030	Pam Landers		11-11-14	24
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 21, 2014

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q1-2014 Groundwater Sampling OrderNo.: 1403358

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/7/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-13
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 11:29:00 AM
Lab ID: 1403358-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.019	0.0020		mg/L	1	3/13/2014 1:14:02 PM	R17289
Cadmium	ND	0.0020		mg/L	1	3/13/2014 1:14:02 PM	R17289
Chromium	ND	0.0060		mg/L	1	3/13/2014 1:14:02 PM	R17289
Copper	ND	0.0060		mg/L	1	3/13/2014 1:14:02 PM	R17289
Iron	ND	0.020		mg/L	1	3/13/2014 1:14:02 PM	R17289
Manganese	0.020	0.0020		mg/L	1	3/13/2014 1:14:02 PM	R17289
Silver	ND	0.0050		mg/L	1	3/13/2014 1:14:02 PM	R17289
Zinc	0.017	0.010		mg/L	1	3/13/2014 1:14:02 PM	R17289
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.020	0.0020		mg/L	1	3/13/2014 5:16:21 PM	12123
Cadmium	ND	0.0020		mg/L	1	3/13/2014 5:16:21 PM	12123
Chromium	ND	0.0060		mg/L	1	3/13/2014 5:16:21 PM	12123
Copper	ND	0.0060		mg/L	1	3/13/2014 5:16:21 PM	12123
Iron	ND	0.020		mg/L	1	3/13/2014 5:16:21 PM	12123
Manganese	0.023	0.0020		mg/L	1	3/13/2014 5:16:21 PM	12123
Silver	ND	0.0050		mg/L	1	3/13/2014 5:16:21 PM	12123
Zinc	ND	0.010		mg/L	1	3/13/2014 5:16:21 PM	12123
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.0010		mg/L	1	3/19/2014 2:03:19 PM	R17423
Lead	ND	0.0010		mg/L	1	3/18/2014 2:21:25 PM	R17401
Selenium	ND	0.0010		mg/L	1	3/19/2014 2:03:19 PM	R17423
Uranium	0.018	0.0010		mg/L	1	3/18/2014 2:21:25 PM	R17401
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.0011	0.0010		mg/L	1	3/17/2014 3:37:52 PM	12123
Lead	ND	0.0010		mg/L	1	3/17/2014 3:37:52 PM	12123
Selenium	ND	0.0010		mg/L	1	3/17/2014 3:37:52 PM	12123
Uranium	0.018	0.0010		mg/L	1	3/17/2014 3:37:52 PM	12123
EPA METHOD 245.1: MERCURY						Analyst: **JML**	
Mercury	ND	0.00020		mg/L	1	3/12/2014 1:03:52 PM	12133
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Toluene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Ethylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Methyl tert-butyl ether (MTBE)	23	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-13
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 11:29:00 AM
Lab ID: 1403358-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Naphthalene	ND	2.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Acetone	ND	10		µg/L	1	3/12/2014 7:09:24 PM	R17267
Bromobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Bromoform	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Bromomethane	ND	3.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
2-Butanone	ND	10		µg/L	1	3/12/2014 7:09:24 PM	R17267
Carbon disulfide	ND	10		µg/L	1	3/12/2014 7:09:24 PM	R17267
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Chlorobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Chloroethane	ND	2.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Chloroform	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Chloromethane	ND	3.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Dibromomethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
2-Hexanone	ND	10		µg/L	1	3/12/2014 7:09:24 PM	R17267
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2014 7:09:24 PM	R17267
Methylene Chloride	ND	3.0		µg/L	1	3/12/2014 7:09:24 PM	R17267

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

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

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Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 11:29:00 AM
Lab ID: 1403358-001 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Styrene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Vinyl chloride	ND	1.0		µg/L	1	3/12/2014 7:09:24 PM	R17267
Xylenes, Total	ND	1.5		µg/L	1	3/12/2014 7:09:24 PM	R17267
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	3/12/2014 7:09:24 PM	R17267
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	1	3/12/2014 7:09:24 PM	R17267
Surr: Dibromofluoromethane	99.7	70-130		%REC	1	3/12/2014 7:09:24 PM	R17267
Surr: Toluene-d8	96.4	70-130		%REC	1	3/12/2014 7:09:24 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-14
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 10:32:00 AM
Lab ID: 1403358-002 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	1.6	0.010		mg/L	5	3/13/2014 1:24:38 PM	R17289
Cadmium	ND	0.0020		mg/L	1	3/13/2014 1:23:05 PM	R17289
Chromium	ND	0.0060		mg/L	1	3/13/2014 1:23:05 PM	R17289
Copper	ND	0.0060		mg/L	1	3/13/2014 1:23:05 PM	R17289
Iron	4.2	0.10	*	mg/L	5	3/13/2014 1:24:38 PM	R17289
Manganese	2.1	0.010	*	mg/L	5	3/13/2014 1:24:38 PM	R17289
Silver	ND	0.0050		mg/L	1	3/13/2014 1:23:05 PM	R17289
Zinc	ND	0.010		mg/L	1	3/13/2014 1:23:05 PM	R17289
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	1.7	0.010		mg/L	5	3/13/2014 5:21:47 PM	12123
Cadmium	ND	0.0020		mg/L	1	3/13/2014 5:20:03 PM	12123
Chromium	ND	0.0060		mg/L	1	3/13/2014 5:20:03 PM	12123
Copper	ND	0.0060		mg/L	1	3/13/2014 5:20:03 PM	12123
Iron	4.7	0.10	*	mg/L	5	3/13/2014 5:21:47 PM	12123
Manganese	2.4	0.010	*	mg/L	5	3/13/2014 5:21:47 PM	12123
Silver	ND	0.0050		mg/L	1	3/13/2014 5:20:03 PM	12123
Zinc	ND	0.010		mg/L	1	3/13/2014 5:20:03 PM	12123
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.0084	0.0050		mg/L	5	3/19/2014 2:06:05 PM	R17423
Lead	ND	0.0010		mg/L	1	3/18/2014 2:26:08 PM	R17401
Selenium	ND	0.0050		mg/L	5	3/19/2014 2:06:05 PM	R17423
Uranium	0.0097	0.0010		mg/L	1	3/18/2014 2:26:08 PM	R17401
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.010	0.0050	*	mg/L	5	3/17/2014 5:13:22 PM	12123
Lead	ND	0.0010		mg/L	1	3/17/2014 3:48:28 PM	12123
Selenium	0.010	0.0050		mg/L	5	3/17/2014 5:13:22 PM	12123
Uranium	0.0097	0.0010		mg/L	1	3/17/2014 3:48:28 PM	12123
EPA METHOD 245.1: MERCURY						Analyst: **JML**	
Mercury	ND	0.00020		mg/L	1	3/12/2014 1:05:40 PM	12133
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	4000	50		µg/L	50	3/12/2014 8:35:20 PM	R17267
Toluene	26	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Ethylbenzene	140	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Methyl tert-butyl ether (MTBE)	1100	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-14
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 10:32:00 AM
Lab ID: 1403358-002 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Naphthalene	ND	20		µg/L	10	3/12/2014 10:30:03 PM	R17267
1-Methylnaphthalene	ND	40		µg/L	10	3/12/2014 10:30:03 PM	R17267
2-Methylnaphthalene	ND	40		µg/L	10	3/12/2014 10:30:03 PM	R17267
Acetone	ND	100		µg/L	10	3/12/2014 10:30:03 PM	R17267
Bromobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Bromodichloromethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Bromoform	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Bromomethane	ND	30		µg/L	10	3/12/2014 10:30:03 PM	R17267
2-Butanone	ND	100		µg/L	10	3/12/2014 10:30:03 PM	R17267
Carbon disulfide	ND	100		µg/L	10	3/12/2014 10:30:03 PM	R17267
Carbon Tetrachloride	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Chlorobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Chloroethane	ND	20		µg/L	10	3/12/2014 10:30:03 PM	R17267
Chloroform	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Chloromethane	ND	30		µg/L	10	3/12/2014 10:30:03 PM	R17267
2-Chlorotoluene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
4-Chlorotoluene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
cis-1,2-DCE	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
cis-1,3-Dichloropropene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/12/2014 10:30:03 PM	R17267
Dibromochloromethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Dibromomethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2-Dichlorobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,3-Dichlorobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,4-Dichlorobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Dichlorodifluoromethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1-Dichloroethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1-Dichloroethene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2-Dichloropropane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,3-Dichloropropane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
2,2-Dichloropropane	ND	20		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1-Dichloropropene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Hexachlorobutadiene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
2-Hexanone	ND	100		µg/L	10	3/12/2014 10:30:03 PM	R17267
Isopropylbenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
4-Isopropyltoluene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
4-Methyl-2-pentanone	ND	100		µg/L	10	3/12/2014 10:30:03 PM	R17267
Methylene Chloride	ND	30		µg/L	10	3/12/2014 10:30:03 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-14
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 10:32:00 AM
Lab ID: 1403358-002 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	30		µg/L	10	3/12/2014 10:30:03 PM	R17267
n-Propylbenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
sec-Butylbenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Styrene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
tert-Butylbenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/12/2014 10:30:03 PM	R17267
Tetrachloroethene (PCE)	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
trans-1,2-DCE	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
trans-1,3-Dichloropropene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1,1-Trichloroethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,1,2-Trichloroethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Trichloroethene (TCE)	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Trichlorofluoromethane	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
1,2,3-Trichloropropane	ND	20		µg/L	10	3/12/2014 10:30:03 PM	R17267
Vinyl chloride	ND	10		µg/L	10	3/12/2014 10:30:03 PM	R17267
Xylenes, Total	32	15		µg/L	10	3/12/2014 10:30:03 PM	R17267
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	10	3/12/2014 10:30:03 PM	R17267
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	10	3/12/2014 10:30:03 PM	R17267
Surr: Dibromofluoromethane	99.2	70-130		%REC	10	3/12/2014 10:30:03 PM	R17267
Surr: Toluene-d8	95.9	70-130		%REC	10	3/12/2014 10:30:03 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-29
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:51:00 AM
Lab ID: 1403358-003
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.059	0.0020		mg/L	1	3/13/2014 1:26:32 PM	R17289
Cadmium	ND	0.0020		mg/L	1	3/13/2014 1:26:32 PM	R17289
Chromium	ND	0.0060		mg/L	1	3/13/2014 1:26:32 PM	R17289
Copper	ND	0.0060		mg/L	1	3/13/2014 1:26:32 PM	R17289
Iron	0.28	0.020		mg/L	1	3/13/2014 1:26:32 PM	R17289
Manganese	0.29	0.0020	*	mg/L	1	3/13/2014 1:26:32 PM	R17289
Silver	ND	0.0050		mg/L	1	3/13/2014 1:26:32 PM	R17289
Zinc	ND	0.010		mg/L	1	3/13/2014 1:26:32 PM	R17289
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.063	0.0020		mg/L	1	3/13/2014 5:32:13 PM	12123
Cadmium	ND	0.0020		mg/L	1	3/13/2014 5:32:13 PM	12123
Chromium	ND	0.0060		mg/L	1	3/13/2014 5:32:13 PM	12123
Copper	ND	0.0060		mg/L	1	3/13/2014 5:32:13 PM	12123
Iron	0.40	0.020	*	mg/L	1	3/13/2014 5:32:13 PM	12123
Manganese	0.30	0.0020	*	mg/L	1	3/13/2014 5:32:13 PM	12123
Silver	ND	0.0050		mg/L	1	3/13/2014 5:32:13 PM	12123
Zinc	ND	0.010		mg/L	1	3/13/2014 5:32:13 PM	12123
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.0050		mg/L	5	3/19/2014 2:14:21 PM	R17423
Lead	ND	0.0010		mg/L	1	3/18/2014 2:30:51 PM	R17401
Selenium	ND	0.0050		mg/L	5	3/19/2014 2:14:21 PM	R17423
Uranium	0.053	0.0050	*	mg/L	5	3/19/2014 2:14:21 PM	R17423
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.0014	0.0010		mg/L	1	3/17/2014 4:04:25 PM	12123
Lead	ND	0.0010		mg/L	1	3/17/2014 4:04:25 PM	12123
Selenium	ND	0.0050		mg/L	5	3/17/2014 5:18:41 PM	12123
Uranium	0.056	0.0050	*	mg/L	5	3/17/2014 5:18:41 PM	12123
EPA METHOD 245.1: MERCURY						Analyst: **JML**	
Mercury	ND	0.00020		mg/L	1	3/12/2014 1:07:35 PM	12133
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Toluene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Ethylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Methyl tert-butyl ether (MTBE)	2100	100		µg/L	100	3/13/2014 12:08:50 PM	R17299
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-29
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:51:00 AM
Lab ID: 1403358-003
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Naphthalene	ND	2.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
2-Methylnaphthalene	ND	4.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Acetone	ND	10		µg/L	1	3/12/2014 11:56:15 PM	R17267
Bromobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Bromodichloromethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Bromoform	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Bromomethane	ND	3.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
2-Butanone	ND	10		µg/L	1	3/12/2014 11:56:15 PM	R17267
Carbon disulfide	ND	10		µg/L	1	3/12/2014 11:56:15 PM	R17267
Carbon Tetrachloride	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Chlorobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Chloroethane	ND	2.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Chloroform	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Chloromethane	ND	3.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
2-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
4-Chlorotoluene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
cis-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Dibromochloromethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Dibromomethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1-Dichloroethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1-Dichloroethene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,3-Dichloropropane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
2,2-Dichloropropane	ND	2.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Hexachlorobutadiene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
2-Hexanone	ND	10		µg/L	1	3/12/2014 11:56:15 PM	R17267
Isopropylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
4-Isopropyltoluene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
4-Methyl-2-pentanone	ND	10		µg/L	1	3/12/2014 11:56:15 PM	R17267
Methylene Chloride	ND	3.0		µg/L	1	3/12/2014 11:56:15 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-29
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:51:00 AM
Lab ID: 1403358-003 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	3.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
n-Propylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
sec-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Styrene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
tert-Butylbenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
trans-1,2-DCE	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Trichlorofluoromethane	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Vinyl chloride	ND	1.0		µg/L	1	3/12/2014 11:56:15 PM	R17267
Xylenes, Total	ND	1.5		µg/L	1	3/12/2014 11:56:15 PM	R17267
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	3/12/2014 11:56:15 PM	R17267
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/12/2014 11:56:15 PM	R17267
Surr: Dibromofluoromethane	102	70-130		%REC	1	3/12/2014 11:56:15 PM	R17267
Surr: Toluene-d8	93.5	70-130		%REC	1	3/12/2014 11:56:15 PM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-30
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 2:05:00 PM
Lab ID: 1403358-004
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.29	0.0020		mg/L	1	3/13/2014 1:30:11 PM	R17289
Cadmium	ND	0.0020		mg/L	1	3/13/2014 1:30:11 PM	R17289
Chromium	0.014	0.0060		mg/L	1	3/13/2014 1:30:11 PM	R17289
Copper	ND	0.0060		mg/L	1	3/13/2014 1:30:11 PM	R17289
Iron	7.2	0.20	*	mg/L	10	3/14/2014 3:01:55 PM	R17335
Manganese	0.18	0.0020	*	mg/L	1	3/13/2014 1:30:11 PM	R17289
Silver	ND	0.0050		mg/L	1	3/13/2014 1:30:11 PM	R17289
Zinc	0.012	0.010		mg/L	1	3/13/2014 1:30:11 PM	R17289
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	1.3	0.010		mg/L	5	3/13/2014 5:37:48 PM	12123
Cadmium	ND	0.0020		mg/L	1	3/13/2014 5:35:59 PM	12123
Chromium	0.031	0.0060		mg/L	1	3/13/2014 5:35:59 PM	12123
Copper	0.0072	0.0060		mg/L	1	3/13/2014 5:35:59 PM	12123
Iron	13	0.40	*	mg/L	20	3/14/2014 2:38:40 PM	12123
Manganese	0.71	0.0020	*	mg/L	1	3/13/2014 5:35:59 PM	12123
Silver	ND	0.0050		mg/L	1	3/13/2014 5:35:59 PM	12123
Zinc	0.029	0.010		mg/L	1	3/13/2014 5:35:59 PM	12123
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.0050		mg/L	5	3/19/2014 2:17:07 PM	R17423
Lead	0.0023	0.0010		mg/L	1	3/18/2014 2:35:34 PM	R17401
Selenium	ND	0.0050		mg/L	5	3/19/2014 2:17:07 PM	R17423
Uranium	0.050	0.0050	*	mg/L	5	3/19/2014 2:17:07 PM	R17423
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.0033	0.0010		mg/L	1	3/17/2014 4:09:43 PM	12123
Lead	0.013	0.0010		mg/L	1	3/17/2014 4:09:43 PM	12123
Selenium	ND	0.0050		mg/L	5	3/17/2014 5:23:59 PM	12123
Uranium	0.054	0.0050	*	mg/L	5	3/17/2014 5:23:59 PM	12123
EPA METHOD 245.1: MERCURY						Analyst: **JML**	
Mercury	ND	0.00020		mg/L	1	3/12/2014 1:09:24 PM	12133
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Toluene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Ethylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Methyl tert-butyl ether (MTBE)	2900	100		µg/L	100	3/13/2014 12:37:42 PM	R17299
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-30
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 2:05:00 PM
Lab ID: 1403358-004 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Naphthalene	ND	2.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Acetone	ND	10		µg/L	1	3/13/2014 1:22:28 AM	R17267
Bromobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Bromoform	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Bromomethane	ND	3.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
2-Butanone	ND	10		µg/L	1	3/13/2014 1:22:28 AM	R17267
Carbon disulfide	ND	10		µg/L	1	3/13/2014 1:22:28 AM	R17267
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Chlorobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Chloroethane	ND	2.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Chloroform	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Chloromethane	ND	3.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Dibromomethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
2-Hexanone	ND	10		µg/L	1	3/13/2014 1:22:28 AM	R17267
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2014 1:22:28 AM	R17267
Methylene Chloride	ND	3.0		µg/L	1	3/13/2014 1:22:28 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: OW-30
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 2:05:00 PM
Lab ID: 1403358-004 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Styrene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Vinyl chloride	ND	1.0		µg/L	1	3/13/2014 1:22:28 AM	R17267
Xylenes, Total	ND	1.5		µg/L	1	3/13/2014 1:22:28 AM	R17267
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	3/13/2014 1:22:28 AM	R17267
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	1	3/13/2014 1:22:28 AM	R17267
Surr: Dibromofluoromethane	101	70-130		%REC	1	3/13/2014 1:22:28 AM	R17267
Surr: Toluene-d8	98.3	70-130		%REC	1	3/13/2014 1:22:28 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-Group #5
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:05:00 AM
Lab ID: 1403358-005 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Toluene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Ethylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Naphthalene	ND	2.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Acetone	ND	10		µg/L	1	3/13/2014 2:19:58 AM	R17267
Bromobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Bromoform	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Bromomethane	ND	3.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
2-Butanone	ND	10		µg/L	1	3/13/2014 2:19:58 AM	R17267
Carbon disulfide	ND	10		µg/L	1	3/13/2014 2:19:58 AM	R17267
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Chlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Chloroethane	ND	2.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Chloroform	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Chloromethane	ND	3.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Dibromomethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2014 2:19:58 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-Group #5
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:05:00 AM
Lab ID: 1403358-005 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
2-Hexanone	ND	10		µg/L	1	3/13/2014 2:19:58 AM	R17267
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2014 2:19:58 AM	R17267
Methylene Chloride	ND	3.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Styrene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Vinyl chloride	ND	1.0		µg/L	1	3/13/2014 2:19:58 AM	R17267
Xylenes, Total	ND	1.5		µg/L	1	3/13/2014 2:19:58 AM	R17267
Surr: 1,2-Dichloroethane-d4	102	70-130		%REC	1	3/13/2014 2:19:58 AM	R17267
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/13/2014 2:19:58 AM	R17267
Surr: Dibromofluoromethane	101	70-130		%REC	1	3/13/2014 2:19:58 AM	R17267
Surr: Toluene-d8	102	70-130		%REC	1	3/13/2014 2:19:58 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EQ Blank
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:10:00 AM
Lab ID: 1403358-006 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Toluene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Ethylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Naphthalene	ND	2.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Acetone	ND	10		µg/L	1	3/13/2014 2:48:41 AM	R17267
Bromobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Bromoform	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Bromomethane	ND	3.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
2-Butanone	ND	10		µg/L	1	3/13/2014 2:48:41 AM	R17267
Carbon disulfide	ND	10		µg/L	1	3/13/2014 2:48:41 AM	R17267
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Chlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Chloroethane	ND	2.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Chloroform	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Chloromethane	ND	3.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Dibromomethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2014 2:48:41 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EQ Blank
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/7/2014 9:10:00 AM
Lab ID: 1403358-006 **Matrix:** AQUEOUS **Received Date:** 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
2-Hexanone	ND	10		µg/L	1	3/13/2014 2:48:41 AM	R17267
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2014 2:48:41 AM	R17267
Methylene Chloride	ND	3.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Styrene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Vinyl chloride	ND	1.0		µg/L	1	3/13/2014 2:48:41 AM	R17267
Xylenes, Total	ND	1.5		µg/L	1	3/13/2014 2:48:41 AM	R17267
Surr: 1,2-Dichloroethane-d4	104	70-130		%REC	1	3/13/2014 2:48:41 AM	R17267
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	1	3/13/2014 2:48:41 AM	R17267
Surr: Dibromofluoromethane	103	70-130		%REC	1	3/13/2014 2:48:41 AM	R17267
Surr: Toluene-d8	98.2	70-130		%REC	1	3/13/2014 2:48:41 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Q1-2014 Groundwater Sampling
Collection Date:
Lab ID: 1403358-007
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
Benzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Toluene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Ethylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Naphthalene	ND	2.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
2-Methylnaphthalene	ND	4.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Acetone	ND	10		µg/L	1	3/13/2014 3:17:24 AM	R17267
Bromobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Bromodichloromethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Bromoform	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Bromomethane	ND	3.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
2-Butanone	ND	10		µg/L	1	3/13/2014 3:17:24 AM	R17267
Carbon disulfide	ND	10		µg/L	1	3/13/2014 3:17:24 AM	R17267
Carbon Tetrachloride	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Chlorobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Chloroethane	ND	2.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Chloroform	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Chloromethane	ND	3.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
2-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
4-Chlorotoluene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
cis-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Dibromochloromethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Dibromomethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,1-Dichloroethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,1-Dichloroethene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,3-Dichloropropane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
2,2-Dichloropropane	ND	2.0		µg/L	1	3/13/2014 3:17:24 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Q1-2014 Groundwater Sampling
Collection Date:
Lab ID: 1403358-007
Matrix: AQUEOUS
Received Date: 3/7/2014 5:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **cadg**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Hexachlorobutadiene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
2-Hexanone	ND	10		µg/L	1	3/13/2014 3:17:24 AM	R17267
Isopropylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
4-Isopropyltoluene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
4-Methyl-2-pentanone	ND	10		µg/L	1	3/13/2014 3:17:24 AM	R17267
Methylene Chloride	ND	3.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
n-Butylbenzene	ND	3.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
n-Propylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
sec-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Styrene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
tert-Butylbenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
trans-1,2-DCE	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Trichlorofluoromethane	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Vinyl chloride	ND	1.0		µg/L	1	3/13/2014 3:17:24 AM	R17267
Xylenes, Total	ND	1.5		µg/L	1	3/13/2014 3:17:24 AM	R17267
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	1	3/13/2014 3:17:24 AM	R17267
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	1	3/13/2014 3:17:24 AM	R17267
Surr: Dibromofluoromethane	101	70-130		%REC	1	3/13/2014 3:17:24 AM	R17267
Surr: Toluene-d8	92.9	70-130		%REC	1	3/13/2014 3:17:24 AM	R17267

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498058** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498059** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.9	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.4	85	115			
Chromium	0.48	0.0060	0.5000	0	96.2	85	115			
Copper	0.48	0.0060	0.5000	0	96.5	85	115			
Iron	0.48	0.020	0.5000	0	95.5	85	115			
Manganese	0.48	0.0020	0.5000	0	95.4	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Zinc	0.49	0.010	0.5000	0	97.2	85	115			

Sample ID **1403420-008AMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	3.7	0.050	2.500	1.186	102	70	130			

Sample ID **1403420-008AMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **R17289**	RunNo: **17289**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	3.7	0.050	2.500	1.186	99.3	70	130	1.98	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403477-001BMS**	SampType:	**MS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17289**		RunNo:	**17289**				
Prep Date:		Analysis Date:	**3/13/2014**		SeqNo:	**498102**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.55	0.020	0.5000	0.1063	88.6	70	130			

Sample ID	**1403477-001BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17289**		RunNo:	**17289**				
Prep Date:		Analysis Date:	**3/13/2014**		SeqNo:	**498103**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.57	0.020	0.5000	0.1063	92.0	70	130	3.10	20	

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17335**		RunNo:	**17335**				
Prep Date:		Analysis Date:	**3/14/2014**		SeqNo:	**499202**	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: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17335**		RunNo:	**17335**				
Prep Date:		Analysis Date:	**3/14/2014**		SeqNo:	**499203**	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	99.4	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **1403307-002DMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498216** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.07097	99.3	70	130			
Cadmium	0.49	0.0020	0.5000	0	97.7	70	130			
Chromium	0.49	0.0060	0.5000	0	97.9	70	130			
Copper	0.51	0.0060	0.5000	0	101	70	130			
Iron	0.53	0.020	0.5000	0	106	70	130			
Manganese	0.58	0.0020	0.5000	0.08615	99.0	70	130			
Silver	0.094	0.0050	0.1000	0	94.4	70	130			
Zinc	0.51	0.010	0.5000	0	102	70	130			

Sample ID **1403307-002DMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498217** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.07097	99.2	70	130	0.104	20	
Cadmium	0.49	0.0020	0.5000	0	97.2	70	130	0.507	20	
Chromium	0.48	0.0060	0.5000	0	96.6	70	130	1.24	20	
Copper	0.51	0.0060	0.5000	0	101	70	130	0.0316	20	
Iron	0.53	0.020	0.5000	0	105	70	130	0.220	20	
Manganese	0.58	0.0020	0.5000	0.08615	98.7	70	130	0.250	20	
Silver	0.091	0.0050	0.1000	0	90.8	70	130	3.86	20	
Zinc	0.50	0.010	0.5000	0	101	70	130	0.940	20	

Sample ID **1403354-001DMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498233** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.64	0.0020	0.5000	0.1369	101	70	130			
Cadmium	0.50	0.0020	0.5000	0	99.1	70	130			
Chromium	0.49	0.0060	0.5000	0	98.1	70	130			
Copper	0.52	0.0060	0.5000	0	103	70	130			
Iron	0.89	0.020	0.5000	0.2846	121	70	130			
Manganese	0.62	0.0020	0.5000	0.09476	105	70	130			
Silver	0.096	0.0050	0.1000	0	96.0	70	130			
Zinc	0.52	0.010	0.5000	0.01156	102	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **1403354-001DMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498234** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.63	0.0020	0.5000	0.1369	98.2	70	130	2.12	20	
Cadmium	0.48	0.0020	0.5000	0	97.0	70	130	2.18	20	
Chromium	0.49	0.0060	0.5000	0	97.3	70	130	0.895	20	
Copper	0.50	0.0060	0.5000	0	101	70	130	2.22	20	
Iron	0.88	0.020	0.5000	0.2846	120	70	130	0.786	20	
Manganese	0.59	0.0020	0.5000	0.09476	99.5	70	130	4.36	20	
Silver	0.095	0.0050	0.1000	0	94.6	70	130	1.46	20	
Zinc	0.52	0.010	0.5000	0.01156	101	70	130	0.729	20	

Sample ID **MB-12123**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498282** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-12123**	SampType: **LCS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW**	Batch ID: **12123**	RunNo: **17291**
Prep Date: **3/11/2014**	Analysis Date: **3/13/2014**	SeqNo: **498283** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.7	85	115			
Cadmium	0.49	0.0020	0.5000	0	99.0	85	115			
Chromium	0.49	0.0060	0.5000	0	97.9	85	115			
Copper	0.49	0.0060	0.5000	0	98.3	85	115			
Iron	0.53	0.020	0.5000	0	106	85	115			
Manganese	0.50	0.0020	0.5000	0	99.2	85	115			
Silver	0.098	0.0050	0.1000	0	98.2	85	115			
Zinc	0.51	0.010	0.5000	0	103	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403420-008AMS**	SampType:	**MS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501189**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.026	0.0010	0.02500	0.0003984	104	70	130			

Sample ID	**1403420-008AMSD**	SampType:	**MSD**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501190**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.027	0.0010	0.02500	0.0003984	105	70	130	0.894	20	

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501192**	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	102	85	115			
Uranium	0.025	0.0010	0.02500	0	100	85	115			

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501193**	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	101	85	115			
Uranium	0.028	0.0010	0.02500	0	110	85	115			

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501194**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17401**		RunNo:	**17401**				
Prep Date:		Analysis Date:	**3/18/2014**		SeqNo:	**501195**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**1403273-002AMS**	SampType:	**MS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**501959**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.12	0.0050	0.1250	0.003578	94.3	70	130			

Sample ID	**1403420-008AMS**	SampType:	**MS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**BatchQC**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**501996**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.0009073	101	70	130			
Selenium	0.13	0.0050	0.1250	0.001602	99.9	70	130			

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**502016**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.7	85	115			
Selenium	0.024	0.0010	0.02500	0	97.2	85	115			
Uranium	0.025	0.0010	0.02500	0	98.9	85	115			

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**502017**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.1	85	115			
Selenium	0.024	0.0010	0.02500	0	97.2	85	115			
Uranium	0.025	0.0010	0.02500	0	99.8	85	115			

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA 200.8: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17423**		RunNo:	**17423**				
Prep Date:		Analysis Date:	**3/19/2014**		SeqNo:	**502018**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17423**	RunNo: **17423**
Prep Date:	Analysis Date: **3/19/2014**	SeqNo: **502019** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **1403307-001DMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **BatchQC** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500678** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.071	0.0050	0.02500	0.04223	114	70	130	2.87	20	

Sample ID **1403307-001DMSDL** SampType: **MSDLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **BatchQC** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500679** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.026	0.0010	0.02500	0.0009814	98.2	70	130	0.481	20	
Lead	0.026	0.0010	0.02500	0.0005163	101	70	130	1.78	20	
Selenium	0.026	0.0010	0.02500	0.003365	91.7	70	130	2.65	20	

Sample ID **1403307-001DMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **BatchQC** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500680** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.069	0.0050	0.02500	0.04223	106	70	130			

Sample ID **1403307-001DMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **BatchQC** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500681** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0.0009814	97.8	70	130			
Lead	0.025	0.0010	0.02500	0.0005163	99.5	70	130			
Selenium	0.026	0.0010	0.02500	0.003365	88.9	70	130			

Sample ID **1403358-001BMSLL** SampType: **MSLL** TestCode: **200.8 ICPMS Metals:Total**

Client ID: **OW-13** Batch ID: **12123** RunNo: **17381**

Prep Date: **3/11/2014** Analysis Date: **3/17/2014** SeqNo: **500694** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0.001050	96.7	70	130			
Lead	0.026	0.0010	0.02500	0	102	70	130			
Selenium	0.023	0.0010	0.02500	0.0008009	87.6	70	130			
Uranium	0.045	0.0010	0.02500	0.01755	110	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**LLLCS-12123**	SampType:	**LCSLL**	TestCode:	**200.8 ICPMS Metals:Total**
Client ID:	**BatchQC**	Batch ID:	**12123**	RunNo:	**17381**
Prep Date:	**3/11/2014**	Analysis Date:	**3/17/2014**	SeqNo:	**500705** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.2	85	115			
Lead	0.025	0.0010	0.02500	0	98.9	85	115			
Selenium	0.023	0.0010	0.02500	0	91.4	85	115			
Uranium	0.026	0.0010	0.02500	0	104	85	115			

Sample ID	**MB-12123**	SampType:	**MBLK**	TestCode:	**200.8 ICPMS Metals:Total**
Client ID:	**PBW**	Batch ID:	**12123**	RunNo:	**17381**
Prep Date:	**3/11/2014**	Analysis Date:	**3/17/2014**	SeqNo:	**500708** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID	**MB-12133**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496787**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-12133**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**LCSW**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496788**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	106	80	120			

Sample ID	**1403329-004AMS**	SampType:	**MS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496797**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	107	75	125			

Sample ID	**1403329-004AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**BatchQC**	Batch ID:	**12133**	RunNo:	**17250**					
Prep Date:	**3/11/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**496798**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0053	0.00020	0.005000	0	107	75	125	0.541	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17267**	RunNo: **17267**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497358** 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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17267**	RunNo: **17267**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497358** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	9.8		10.00		98.0	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17267**	RunNo: **17267**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497360** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	26	1.0	20.00	0	128	70	130			
Toluene	22	1.0	20.00	0	111	80	120			
Chlorobenzene	21	1.0	20.00	0	104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17267**	RunNo: **17267**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497360** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	24	1.0	20.00	0	121	90	143			
Trichloroethene (TCE)	23	1.0	20.00	0	114	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		114	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	12		10.00		119	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID **1403358-001a ms**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **OW-13**	Batch ID: **R17267**	RunNo: **17267**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497366** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	70	130			
Toluene	21	1.0	20.00	0	107	67.5	123			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	81.9	134			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID **1403358-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **OW-13**	Batch ID: **R17267**	RunNo: **17267**
Prep Date:	Analysis Date: **3/12/2014**	SeqNo: **497367** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	70	130	0.0612	20	
Toluene	21	1.0	20.00	0	104	67.5	123	3.21	20	
Chlorobenzene	20	1.0	20.00	0	99.6	70	130	4.61	20	
1,1-Dichloroethene	23	1.0	20.00	0	113	81.9	134	0.471	20	
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130	0.432	20	
Surr: 1,2-Dichloroethane-d4	11		10.00		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		106	70	130	0	0	
Surr: Toluene-d8	9.8		10.00		98.2	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403358**

21-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **5mL rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17299**	RunNo: **17299**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498323** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17299**	RunNo: **17299**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498325** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.5		10.00		95.3	70	130			

Sample ID **1403475-001a ms**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **R17299**	RunNo: **17299**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498342** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.5	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID **1403475-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC**	Batch ID: **R17299**	RunNo: **17299**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498343** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130	0	0	
Surr: 4-Bromofluorobenzene	8.9		10.00		89.4	70	130	0	0	
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130	0	0	
Surr: Toluene-d8	10		10.00		101	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1403358 RcptNo: 1

Received by/date: AG 03/07/14

Logged By: Anne Thorne 3/7/2014 5:00:00 PM Anne Thorne

Completed By: Anne Thorne 3/11/2014 Anne Thorne

Reviewed By: MJ 03/11/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

Chain-of-Custody Record

Client: Western Refining

Mailing Address: Rt 3 Box 7
Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-722-0210

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

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush_____

Project Name: Q1-2014 Groundwater Sampling

Project #: Quarterly Sampling

Project Manager: Cheryl Johnson

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.8

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. 1403358		WQCC Metals (Total and Dissolved)													Air Bubbles (Y or N)
3/7/14	1129	GW	OW-13			-001	x	x													
3/7/14	1032	GW	OW-14			-002	x	x													
3/7/14	951	GW	OW-29			-003	x	x													
3/7/14	1405	GW	OW-30			-004	x	x													
3/7/14	0905		FB-Group#5-			-005	x														
3/7/14	0910		EQ BLANK			-006	X														
			Trip Blank 03/11/14			-007	X														

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/7/14	1700	Tom Adams			
Date:	Time:	Relinquished by:	Received by:	Date	Time
				03/07/14	1700

Remarks:

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

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

December 10, 2014

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q4 2014 OrderNo.: 1411536

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 11/13/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Case Narrative

WO#: **1411536**
Date: **12/10/2014**

CLIENT: Western Refining Southwest, Gallup
Project: Q4 2014

Analytical Notes Regarding EPA Method 8260:
Samples that were diluted were done so because of the foamy matrix.

Analytical Notes Regarding BOD:
Samples EP-5, EP-6 and EP-12A are being reported as < due to all of the BOD bottles in the dilution series having a depletion of <2.0mg/L.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-111214-2
Project: Q4 2014
Collection Date: 11/12/2014 5:15:00 PM
Lab ID: 1411536-001
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Toluene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Ethylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Naphthalene	ND	2.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1-Methylnaphthalene	ND	4.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
2-Methylnaphthalene	ND	4.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Acetone	ND	10		µg/L	1	11/20/2014 2:20:14 AM	R22653
Bromobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Bromodichloromethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Bromoform	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Bromomethane	ND	3.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
2-Butanone	ND	10		µg/L	1	11/20/2014 2:20:14 AM	R22653
Carbon disulfide	ND	10		µg/L	1	11/20/2014 2:20:14 AM	R22653
Carbon Tetrachloride	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Chlorobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Chloroethane	ND	2.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Chloroform	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Chloromethane	ND	3.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
2-Chlorotoluene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
4-Chlorotoluene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
cis-1,2-DCE	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Dibromochloromethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Dibromomethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,1-Dichloroethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,1-Dichloroethene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2-Dichloropropane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,3-Dichloropropane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
2,2-Dichloropropane	ND	2.0		µg/L	1	11/20/2014 2:20:14 AM	R22653

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-111214-2
Project: Q4 2014
Collection Date: 11/12/2014 5:15:00 PM
Lab ID: 1411536-001
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Hexachlorobutadiene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
2-Hexanone	ND	10		µg/L	1	11/20/2014 2:20:14 AM	R22653
Isopropylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
4-Isopropyltoluene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
4-Methyl-2-pentanone	ND	10		µg/L	1	11/20/2014 2:20:14 AM	R22653
Methylene Chloride	ND	3.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
n-Butylbenzene	ND	3.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
n-Propylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
sec-Butylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Styrene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
tert-Butylbenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
trans-1,2-DCE	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Trichlorofluoromethane	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Vinyl chloride	ND	1.0		µg/L	1	11/20/2014 2:20:14 AM	R22653
Xylenes, Total	ND	1.5		µg/L	1	11/20/2014 2:20:14 AM	R22653
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%REC	1	11/20/2014 2:20:14 AM	R22653
Surr: 4-Bromofluorobenzene	93.0	70-130		%REC	1	11/20/2014 2:20:14 AM	R22653
Surr: Dibromofluoromethane	97.6	70-130		%REC	1	11/20/2014 2:20:14 AM	R22653
Surr: Toluene-d8	100	70-130		%REC	1	11/20/2014 2:20:14 AM	R22653

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q4 2014
Collection Date: 11/12/2014 2:20:00 PM
Lab ID: 1411536-002
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	27	10	*	mg/L	100	11/14/2014 12:59:11 PM	R22558
Chloride	13000	500		mg/L	1E	11/25/2014 12:05:31 AM	R22782
Nitrogen, Nitrite (As N)	ND	10		mg/L	100	11/14/2014 12:59:11 PM	R22558
Bromide	3.5	1.0		mg/L	10	11/14/2014 12:46:46 PM	R22558
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	11/14/2014 12:46:46 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/14/2014 12:46:46 PM	R22558
Sulfate	2100	50		mg/L	100	11/14/2014 12:59:11 PM	R22558
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.13	0.0020		mg/L	1	11/16/2014 9:33:12 PM	R22599
Cadmium	ND	0.0020		mg/L	1	11/16/2014 9:33:12 PM	R22599
Calcium	520	10		mg/L	10	11/24/2014 12:31:25 PM	R22752
Chromium	0.0089	0.0060		mg/L	1	11/16/2014 9:33:12 PM	R22599
Copper	ND	0.0060		mg/L	1	11/16/2014 9:33:12 PM	R22599
Iron	0.24	0.020		mg/L	1	11/16/2014 9:33:12 PM	R22599
Magnesium	250	5.0		mg/L	5	11/16/2014 9:35:00 PM	R22599
Manganese	0.48	0.0020	*	mg/L	1	11/16/2014 9:33:12 PM	R22599
Potassium	320	5.0		mg/L	5	11/16/2014 9:35:00 PM	R22599
Silver	ND	0.0050		mg/L	1	11/16/2014 9:33:12 PM	R22599
Sodium	7400	100		mg/L	100	11/24/2014 12:33:29 PM	R22752
Zinc	ND	0.010		mg/L	1	11/16/2014 9:33:12 PM	R22599
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.13	0.0020		mg/L	1	11/18/2014 3:59:36 PM	16416
Cadmium	ND	0.0020		mg/L	1	11/18/2014 3:59:36 PM	16416
Chromium	0.0077	0.0060		mg/L	1	11/18/2014 3:59:36 PM	16416
Copper	ND	0.0060		mg/L	1	11/18/2014 3:59:36 PM	16416
Iron	0.62	0.020	*	mg/L	1	11/18/2014 3:59:36 PM	16416
Manganese	0.48	0.0020	*	mg/L	1	11/18/2014 3:59:36 PM	16416
Silver	ND	0.0050		mg/L	1	11/18/2014 3:59:36 PM	16416
Zinc	0.012	0.010		mg/L	1	11/20/2014 6:05:58 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.025	0.020	*	mg/L	20	12/1/2014 3:18:04 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:18:04 PM	R22871
Selenium	ND	0.020		mg/L	20	12/1/2014 3:18:04 PM	R22871
Uranium	ND	0.020		mg/L	20	12/1/2014 3:18:04 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.032	0.020	*	mg/L	20	11/26/2014 7:02:50 PM	16416
Lead	ND	0.020		mg/L	20	11/26/2014 7:02:50 PM	16416

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q4 2014
Collection Date: 11/12/2014 2:20:00 PM
Lab ID: 1411536-002
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Selenium	ND	0.050		mg/L	50	12/3/2014 2:29:21 PM	16416
Uranium	ND	0.050		mg/L	50	12/3/2014 2:29:21 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:07:06 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	<20.55	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 2:06:36 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Bis(2-ethylhexyl)phthalate	13	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q4 2014
Collection Date: 11/12/2014 2:20:00 PM
Lab ID: 1411536-002
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 2:06:36 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 2:06:36 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 2:06:36 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 2:06:36 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q4 2014
Collection Date: 11/12/2014 2:20:00 PM
Lab ID: 1411536-002
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 2:06:36 PM	16427
Surr: 2-Fluorophenol	48.0	17.6-104		%REC	1	11/19/2014 2:06:36 PM	16427
Surr: Phenol-d5	51.1	17.7-89.9		%REC	1	11/19/2014 2:06:36 PM	16427
Surr: 2,4,6-Tribromophenol	39.2	16.3-122		%REC	1	11/19/2014 2:06:36 PM	16427
Surr: Nitrobenzene-d5	59.4	45.3-117		%REC	1	11/19/2014 2:06:36 PM	16427
Surr: 2-Fluorobiphenyl	53.1	43-113		%REC	1	11/19/2014 2:06:36 PM	16427
Surr: 4-Terphenyl-d14	52.5	47.6-122		%REC	1	11/19/2014 2:06:36 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 2:49:58 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 2:49:58 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 2:49:58 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 2:49:58 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 2:49:58 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 2:49:58 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 2:49:58 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 2:49:58 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 2:49:58 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 2:49:58 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 2:49:58 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q4 2014
Collection Date: 11/12/2014 2:20:00 PM
Lab ID: 1411536-002
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 2:49:58 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 2:49:58 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 2:49:58 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 2:49:58 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 2:49:58 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 2:49:58 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 2:49:58 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 2:49:58 AM	R22653
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%REC	10	11/20/2014 2:49:58 AM	R22653
Surr: 4-Bromofluorobenzene	103	70-130		%REC	10	11/20/2014 2:49:58 AM	R22653
Surr: Dibromofluoromethane	97.6	70-130		%REC	10	11/20/2014 2:49:58 AM	R22653
Surr: Toluene-d8	101	70-130		%REC	10	11/20/2014 2:49:58 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q4 2014
Collection Date: 11/12/2014 2:20:00 PM
Lab ID: 1411536-002
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	44000	0.50		µmhos/cm	50	11/21/2014 7:12:41 PM	R22735
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.93	1.68	H	pH units	1	11/20/2014 7:59:48 PM	R22708

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q4 2014
Collection Date: 11/12/2014 2:45:00 PM
Lab ID: 1411536-003
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	26	10	*	mg/L	100	11/14/2014 1:24:01 PM	R22558
Chloride	15000	500		mg/L	1E	11/25/2014 12:17:56 AM	R22782
Nitrogen, Nitrite (As N)	ND	10		mg/L	100	11/14/2014 1:24:01 PM	R22558
Bromide	4.3	1.0		mg/L	10	11/14/2014 1:11:36 PM	R22558
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	11/14/2014 1:11:36 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/14/2014 1:11:36 PM	R22558
Sulfate	2200	50		mg/L	100	11/14/2014 1:24:01 PM	R22558
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.14	0.010		mg/L	5	11/16/2014 9:38:42 PM	R22599
Cadmium	ND	0.010		mg/L	5	11/16/2014 9:38:42 PM	R22599
Calcium	540	10		mg/L	10	11/24/2014 12:41:24 PM	R22752
Chromium	ND	0.030		mg/L	5	11/16/2014 9:38:42 PM	R22599
Copper	ND	0.030		mg/L	5	11/16/2014 9:38:42 PM	R22599
Iron	0.20	0.10		mg/L	5	11/16/2014 9:38:42 PM	R22599
Magnesium	290	5.0		mg/L	5	11/16/2014 9:38:42 PM	R22599
Manganese	0.53	0.010	*	mg/L	5	11/16/2014 9:38:42 PM	R22599
Potassium	370	5.0		mg/L	5	11/16/2014 9:38:42 PM	R22599
Silver	ND	0.025		mg/L	5	11/16/2014 9:38:42 PM	R22599
Sodium	8400	100		mg/L	100	11/24/2014 12:43:28 PM	R22752
Zinc	ND	0.050		mg/L	5	11/16/2014 9:38:42 PM	R22599
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.15	0.0020		mg/L	1	11/18/2014 4:03:37 PM	16416
Cadmium	ND	0.0020		mg/L	1	11/18/2014 4:03:37 PM	16416
Chromium	0.0082	0.0060		mg/L	1	11/18/2014 4:03:37 PM	16416
Copper	ND	0.0060		mg/L	1	11/18/2014 4:03:37 PM	16416
Iron	1.6	0.10	*	mg/L	5	11/18/2014 4:05:33 PM	16416
Manganese	0.55	0.0020	*	mg/L	1	11/18/2014 4:03:37 PM	16416
Silver	ND	0.0050		mg/L	1	11/18/2014 4:03:37 PM	16416
Zinc	ND	0.020		mg/L	2	11/21/2014 4:55:03 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.027	0.020	*	mg/L	20	12/1/2014 3:21:11 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:21:11 PM	R22871
Selenium	0.025	0.020		mg/L	20	12/1/2014 3:21:11 PM	R22871
Uranium	ND	0.020		mg/L	20	12/1/2014 3:21:11 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.034	0.020	*	mg/L	20	11/26/2014 7:06:20 PM	16416
Lead	ND	0.020		mg/L	20	11/26/2014 7:06:20 PM	16416

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q4 2014
Collection Date: 11/12/2014 2:45:00 PM
Lab ID: 1411536-003
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Selenium	ND	0.050		mg/L	50	12/3/2014 2:32:26 PM	16416
Uranium	ND	0.050		mg/L	50	12/3/2014 2:32:26 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:08:53 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	<15.30	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 2:34:29 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q4 2014
Collection Date: 11/12/2014 2:45:00 PM
Lab ID: 1411536-003
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 2:34:29 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 2:34:29 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 2:34:29 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 2:34:29 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q4 2014
Collection Date: 11/12/2014 2:45:00 PM
Lab ID: 1411536-003
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 2:34:29 PM	16427
Surr: 2-Fluorophenol	39.4	17.6-104		%REC	1	11/19/2014 2:34:29 PM	16427
Surr: Phenol-d5	52.7	17.7-89.9		%REC	1	11/19/2014 2:34:29 PM	16427
Surr: 2,4,6-Tribromophenol	32.2	16.3-122		%REC	1	11/19/2014 2:34:29 PM	16427
Surr: Nitrobenzene-d5	51.2	45.3-117		%REC	1	11/19/2014 2:34:29 PM	16427
Surr: 2-Fluorobiphenyl	47.4	43-113		%REC	1	11/19/2014 2:34:29 PM	16427
Surr: 4-Terphenyl-d14	55.1	47.6-122		%REC	1	11/19/2014 2:34:29 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 3:19:35 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 3:19:35 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 3:19:35 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 3:19:35 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 3:19:35 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 3:19:35 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 3:19:35 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 3:19:35 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 3:19:35 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 3:19:35 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 3:19:35 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q4 2014
Collection Date: 11/12/2014 2:45:00 PM
Lab ID: 1411536-003
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 3:19:35 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 3:19:35 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 3:19:35 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 3:19:35 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 3:19:35 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 3:19:35 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 3:19:35 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 3:19:35 AM	R22653
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%REC	10	11/20/2014 3:19:35 AM	R22653
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	10	11/20/2014 3:19:35 AM	R22653
Surr: Dibromofluoromethane	92.4	70-130		%REC	10	11/20/2014 3:19:35 AM	R22653
Surr: Toluene-d8	91.8	70-130		%REC	10	11/20/2014 3:19:35 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q4 2014
Collection Date: 11/12/2014 2:45:00 PM
Lab ID: 1411536-003
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	48000	0.50		µmhos/cm	50	11/21/2014 7:16:57 PM	R22735
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.99	1.68	H	pH units	1	11/20/2014 8:03:59 PM	R22708

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q4 2014
Collection Date: 11/12/2014 4:24:00 PM
Lab ID: 1411536-004
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	44	10	*	mg/L	100	11/14/2014 1:48:49 PM	R22558
Chloride	61000	2500		mg/L	5E	11/26/2014 2:49:44 PM	R22848
Bromide	33	10		mg/L	100	11/14/2014 1:48:49 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/14/2014 1:36:25 PM	R22558
Sulfate	12000	250		mg/L	500	11/25/2014 12:30:21 AM	R22782
Nitrate+Nitrite as N	ND	40		mg/L	200	11/24/2014 10:01:25 PM	R22782
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.19	0.010		mg/L	5	11/18/2014 6:15:29 PM	R22614
Cadmium	ND	0.010		mg/L	5	11/18/2014 6:15:29 PM	R22614
Calcium	1100	20		mg/L	20	11/24/2014 12:47:07 PM	R22752
Chromium	ND	0.030		mg/L	5	11/18/2014 6:15:29 PM	R22614
Copper	ND	0.030		mg/L	5	11/18/2014 6:15:29 PM	R22614
Iron	0.35	0.10	*	mg/L	5	11/24/2014 12:45:25 PM	R22752
Magnesium	1200	20		mg/L	20	11/24/2014 12:47:07 PM	R22752
Manganese	0.80	0.010	*	mg/L	5	11/18/2014 6:15:29 PM	R22614
Potassium	1600	20		mg/L	20	11/24/2014 12:47:07 PM	R22752
Silver	ND	0.025		mg/L	5	11/18/2014 6:15:29 PM	R22614
Sodium	32000	500		mg/L	500	11/24/2014 12:55:15 PM	R22752
Zinc	ND	0.050		mg/L	5	11/18/2014 6:15:29 PM	R22614
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.20	0.010		mg/L	5	11/18/2014 4:18:01 PM	16416
Cadmium	ND	0.010		mg/L	5	11/18/2014 4:18:01 PM	16416
Chromium	ND	0.030		mg/L	5	11/18/2014 4:18:01 PM	16416
Copper	ND	0.030		mg/L	5	11/18/2014 4:18:01 PM	16416
Iron	0.72	0.10	*	mg/L	5	11/18/2014 4:18:01 PM	16416
Manganese	1.1	0.010	*	mg/L	5	11/18/2014 4:18:01 PM	16416
Silver	ND	0.025		mg/L	5	11/18/2014 4:18:01 PM	16416
Zinc	ND	0.050		mg/L	5	11/20/2014 4:21:25 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.11	0.050	*	mg/L	50	12/1/2014 4:04:58 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:24:18 PM	R22871
Selenium	ND	0.20	*	mg/L	20	12/1/2014 3:24:18 PM	R22871
Uranium	ND	0.020		mg/L	20	12/1/2014 3:24:18 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.14	0.050	*	mg/L	50	12/3/2014 2:35:31 PM	16416
Lead	ND	0.050		mg/L	50	12/3/2014 2:35:31 PM	16416
Selenium	ND	0.50	*	mg/L	50	12/3/2014 2:35:31 PM	16416

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Qualifiers:

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q4 2014
Collection Date: 11/12/2014 4:24:00 PM
Lab ID: 1411536-004
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Uranium	ND	0.050		mg/L	50	12/3/2014 2:35:31 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:10:41 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	28	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 3:02:12 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427

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Qualifiers:

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R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q4 2014
Collection Date: 11/12/2014 4:24:00 PM
Lab ID: 1411536-004
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 3:02:12 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 3:02:12 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 3:02:12 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 3:02:12 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 3:02:12 PM	16427

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

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q4 2014
Collection Date: 11/12/2014 4:24:00 PM
Lab ID: 1411536-004
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Surr: 2-Fluorophenol	20.7	17.6-104		%REC	1	11/19/2014 3:02:12 PM	16427
Surr: Phenol-d5	33.7	17.7-89.9		%REC	1	11/19/2014 3:02:12 PM	16427
Surr: 2,4,6-Tribromophenol	28.8	16.3-122		%REC	1	11/19/2014 3:02:12 PM	16427
Surr: Nitrobenzene-d5	53.1	45.3-117		%REC	1	11/19/2014 3:02:12 PM	16427
Surr: 2-Fluorobiphenyl	44.4	43-113		%REC	1	11/19/2014 3:02:12 PM	16427
Surr: 4-Terphenyl-d14	36.4	47.6-122	S	%REC	1	11/19/2014 3:02:12 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 3:49:23 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 3:49:23 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 3:49:23 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 3:49:23 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 3:49:23 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 3:49:23 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 3:49:23 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 3:49:23 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 3:49:23 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 3:49:23 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 3:49:23 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q4 2014
Collection Date: 11/12/2014 4:24:00 PM
Lab ID: 1411536-004
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 3:49:23 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 3:49:23 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 3:49:23 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 3:49:23 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 3:49:23 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 3:49:23 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 3:49:23 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 3:49:23 AM	R22653
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%REC	10	11/20/2014 3:49:23 AM	R22653
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	10	11/20/2014 3:49:23 AM	R22653
Surr: Dibromofluoromethane	96.8	70-130		%REC	10	11/20/2014 3:49:23 AM	R22653
Surr: Toluene-d8	92.2	70-130		%REC	10	11/20/2014 3:49:23 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	160000	1.0		µmhos/cm	100	11/21/2014 7:21:18 PM	R22735

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q4 2014
Collection Date: 11/12/2014 4:24:00 PM
Lab ID: 1411536-004
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.82	1.68	H	pH units	1	11/20/2014 8:08:05 PM	R22708

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q4 2014
Collection Date: 11/12/2014 4:53:00 PM
Lab ID: 1411536-005
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	41	10	*	mg/L	100	11/14/2014 2:13:38 PM	R22558
Chloride	61000	2500		mg/L	5E	11/26/2014 3:02:08 PM	R22848
Bromide	29	10		mg/L	100	11/14/2014 2:13:38 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	50		mg/L	100	11/14/2014 2:13:38 PM	R22558
Sulfate	11000	250		mg/L	500	11/25/2014 12:42:45 AM	R22782
Nitrate+Nitrite as N	ND	40		mg/L	200	11/24/2014 10:13:50 PM	R22782
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.17	0.010		mg/L	5	11/18/2014 6:19:36 PM	R22614
Cadmium	ND	0.010		mg/L	5	11/18/2014 6:19:36 PM	R22614
Calcium	1100	20		mg/L	20	11/24/2014 12:53:07 PM	R22752
Chromium	ND	0.030		mg/L	5	11/18/2014 6:19:36 PM	R22614
Copper	ND	0.030		mg/L	5	11/18/2014 6:19:36 PM	R22614
Iron	0.23	0.10		mg/L	5	11/24/2014 12:51:19 PM	R22752
Magnesium	1200	20		mg/L	20	11/24/2014 12:53:07 PM	R22752
Manganese	0.77	0.010	*	mg/L	5	11/18/2014 6:19:36 PM	R22614
Potassium	1700	20		mg/L	20	11/24/2014 12:53:07 PM	R22752
Silver	ND	0.025		mg/L	5	11/18/2014 6:19:36 PM	R22614
Sodium	32000	500		mg/L	500	11/24/2014 12:59:16 PM	R22752
Zinc	ND	0.050		mg/L	5	11/18/2014 6:19:36 PM	R22614
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.20	0.010		mg/L	5	11/18/2014 4:22:44 PM	16416
Cadmium	ND	0.010		mg/L	5	11/18/2014 4:22:44 PM	16416
Chromium	ND	0.030		mg/L	5	11/18/2014 4:22:44 PM	16416
Copper	ND	0.030		mg/L	5	11/18/2014 4:22:44 PM	16416
Iron	0.57	0.10	*	mg/L	5	11/18/2014 4:22:44 PM	16416
Manganese	1.2	0.010	*	mg/L	5	11/18/2014 4:22:44 PM	16416
Silver	ND	0.025		mg/L	5	11/18/2014 4:22:44 PM	16416
Zinc	ND	0.050		mg/L	5	11/21/2014 4:52:35 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.11	0.050	*	mg/L	50	12/1/2014 4:14:18 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:27:24 PM	R22871
Selenium	ND	0.20	*	mg/L	20	12/1/2014 3:27:24 PM	R22871
Uranium	ND	0.020		mg/L	20	12/1/2014 3:27:24 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.14	0.050	*	mg/L	50	12/3/2014 2:38:36 PM	16416
Lead	ND	0.050		mg/L	50	12/3/2014 2:38:36 PM	16416
Selenium	ND	0.50	*	mg/L	50	12/3/2014 2:38:36 PM	16416

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q4 2014
Collection Date: 11/12/2014 4:53:00 PM
Lab ID: 1411536-005
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Uranium	ND	0.050		mg/L	50	12/3/2014 2:38:36 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:12:29 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	27	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Acenaphthylene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Aniline	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Anthracene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Azobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Benz(a)anthracene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Benzo(a)pyrene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Benzo(b)fluoranthene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Benzo(g,h,i)perylene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Benzo(k)fluoranthene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Benzoic acid	ND	22		µg/L	1	11/20/2014 6:29:40 PM	16481
Benzyl alcohol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Bis(2-chloroethoxy)methane	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Bis(2-chloroethyl)ether	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Bis(2-chloroisopropyl)ether	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Bis(2-ethylhexyl)phthalate	18	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4-Bromophenyl phenyl ether	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Butyl benzyl phthalate	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Carbazole	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4-Chloro-3-methylphenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4-Chloroaniline	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2-Chloronaphthalene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2-Chlorophenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4-Chlorophenyl phenyl ether	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Chrysene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Di-n-butyl phthalate	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Di-n-octyl phthalate	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Dibenz(a,h)anthracene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Dibenzofuran	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
1,2-Dichlorobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
1,3-Dichlorobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
1,4-Dichlorobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q4 2014
Collection Date: 11/12/2014 4:53:00 PM
Lab ID: 1411536-005
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
3,3´-Dichlorobenzidine	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Diethyl phthalate	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Dimethyl phthalate	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2,4-Dichlorophenol	ND	22		µg/L	1	11/20/2014 6:29:40 PM	16481
2,4-Dimethylphenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4,6-Dinitro-2-methylphenol	ND	22		µg/L	1	11/20/2014 6:29:40 PM	16481
2,4-Dinitrophenol	ND	22		µg/L	1	11/20/2014 6:29:40 PM	16481
2,4-Dinitrotoluene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2,6-Dinitrotoluene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Fluoranthene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Fluorene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Hexachlorobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Hexachlorobutadiene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Hexachlorocyclopentadiene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Hexachloroethane	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Indeno(1,2,3-cd)pyrene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Isophorone	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
1-Methylnaphthalene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2-Methylnaphthalene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2-Methylphenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
3+4-Methylphenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
N-Nitrosodi-n-propylamine	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
N-Nitrosodimethylamine	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
N-Nitrosodiphenylamine	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Naphthalene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2-Nitroaniline	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
3-Nitroaniline	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4-Nitroaniline	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Nitrobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2-Nitrophenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
4-Nitrophenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Pentachlorophenol	ND	22		µg/L	1	11/20/2014 6:29:40 PM	16481
Phenanthrene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Phenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Pyrene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
Pyridine	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
1,2,4-Trichlorobenzene	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2,4,5-Trichlorophenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481
2,4,6-Trichlorophenol	ND	11		µg/L	1	11/20/2014 6:29:40 PM	16481

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Hall Environmental Analysis Laboratory, Inc.

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Collection Date: 11/12/2014 4:53:00 PM
Lab ID: 1411536-005 **Matrix:** AQUEOUS **Received Date:** 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Surr: 2-Fluorophenol	53.3	17.6-104		%REC	1	11/20/2014 6:29:40 PM	16481
Surr: Phenol-d5	48.7	17.7-89.9		%REC	1	11/20/2014 6:29:40 PM	16481
Surr: 2,4,6-Tribromophenol	55.9	16.3-122		%REC	1	11/20/2014 6:29:40 PM	16481
Surr: Nitrobenzene-d5	58.3	45.3-117		%REC	1	11/20/2014 6:29:40 PM	16481
Surr: 2-Fluorobiphenyl	62.1	43-113		%REC	1	11/20/2014 6:29:40 PM	16481
Surr: 4-Terphenyl-d14	49.8	47.6-122		%REC	1	11/20/2014 6:29:40 PM	16481
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 4:19:10 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 4:19:10 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 4:19:10 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 4:19:10 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 4:19:10 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 4:19:10 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 4:19:10 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 4:19:10 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 4:19:10 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 4:19:10 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 4:19:10 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q4 2014
Collection Date: 11/12/2014 4:53:00 PM
Lab ID: 1411536-005
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 4:19:10 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 4:19:10 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 4:19:10 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 4:19:10 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 4:19:10 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 4:19:10 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 4:19:10 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 4:19:10 AM	R22653
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	10	11/20/2014 4:19:10 AM	R22653
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	10	11/20/2014 4:19:10 AM	R22653
Surr: Dibromofluoromethane	103	70-130		%REC	10	11/20/2014 4:19:10 AM	R22653
Surr: Toluene-d8	89.7	70-130		%REC	10	11/20/2014 4:19:10 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	170000	1.0		µmhos/cm	100	11/21/2014 7:25:41 PM	R22735

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q4 2014
Collection Date: 11/12/2014 4:53:00 PM
Lab ID: 1411536-005
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.82	1.68	H	pH units	1	11/20/2014 8:12:15 PM	R22708

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q4 2014
Collection Date: 11/13/2014 8:30:00 AM
Lab ID: 1411536-006
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	22	10	*	mg/L	100	11/14/2014 2:38:27 PM	R22558
Chloride	98000	5000		mg/L	1E	11/26/2014 3:14:33 PM	R22848
Bromide	34	10		mg/L	100	11/14/2014 2:38:27 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/14/2014 2:26:03 PM	R22558
Sulfate	12000	500		mg/L	1E	11/25/2014 12:55:10 AM	R22782
Nitrate+Nitrite as N	ND	100		mg/L	500	11/26/2014 4:37:05 AM	R22802
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.25	0.010		mg/L	5	11/18/2014 6:24:11 PM	R22614
Cadmium	ND	0.010		mg/L	5	11/18/2014 6:24:11 PM	R22614
Calcium	1500	20		mg/L	20	11/24/2014 1:10:28 PM	R22752
Chromium	ND	0.030		mg/L	5	11/18/2014 6:24:11 PM	R22614
Copper	ND	0.030		mg/L	5	11/18/2014 6:24:11 PM	R22614
Iron	ND	0.10		mg/L	5	11/24/2014 1:40:10 PM	R22752
Magnesium	2000	20		mg/L	20	11/24/2014 1:10:28 PM	R22752
Manganese	0.18	0.010	*	mg/L	5	11/18/2014 6:24:11 PM	R22614
Potassium	2400	50		mg/L	50	11/24/2014 1:12:12 PM	R22752
Silver	ND	0.025		mg/L	5	11/18/2014 6:24:11 PM	R22614
Sodium	64000	1000		mg/L	1E	11/24/2014 1:43:46 PM	R22752
Zinc	0.051	0.050		mg/L	5	11/18/2014 6:24:11 PM	R22614
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.25	0.010		mg/L	5	11/18/2014 4:26:59 PM	16416
Cadmium	ND	0.010		mg/L	5	11/18/2014 4:26:59 PM	16416
Chromium	ND	0.030		mg/L	5	11/18/2014 4:26:59 PM	16416
Copper	ND	0.030		mg/L	5	11/18/2014 4:26:59 PM	16416
Iron	0.19	0.10		mg/L	5	11/18/2014 4:26:59 PM	16416
Manganese	0.25	0.010	*	mg/L	5	11/18/2014 4:26:59 PM	16416
Silver	ND	0.025		mg/L	5	11/18/2014 4:26:59 PM	16416
Zinc	ND	0.10		mg/L	10	11/21/2014 5:19:45 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.16	0.050	*	mg/L	50	12/1/2014 4:17:24 PM	R22871
Lead	ND	0.050		mg/L	50	12/1/2014 4:17:24 PM	R22871
Selenium	ND	0.50	*	mg/L	50	12/1/2014 4:17:24 PM	R22871
Uranium	ND	0.050		mg/L	50	12/2/2014 5:41:37 PM	R22885
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.20	0.10	*	mg/L	100	12/3/2014 2:57:13 PM	16416
Lead	ND	0.050		mg/L	50	12/3/2014 2:41:40 PM	16416
Selenium	ND	1.0	*	mg/L	100	12/3/2014 2:57:13 PM	16416

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q4 2014
Collection Date: 11/13/2014 8:30:00 AM
Lab ID: 1411536-006
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Uranium	ND	0.050		mg/L	50	12/3/2014 2:41:40 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:17:59 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	4.2	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 3:57:37 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Bis(2-ethylhexyl)phthalate	18	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q4 2014
Collection Date: 11/13/2014 8:30:00 AM
Lab ID: 1411536-006
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 3:57:37 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 3:57:37 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 3:57:37 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 3:57:37 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 3:57:37 PM	16427

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q4 2014
Collection Date: 11/13/2014 8:30:00 AM
Lab ID: 1411536-006
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Surr: 2-Fluorophenol	57.0	17.6-104		%REC	1	11/19/2014 3:57:37 PM	16427
Surr: Phenol-d5	63.8	17.7-89.9		%REC	1	11/19/2014 3:57:37 PM	16427
Surr: 2,4,6-Tribromophenol	38.7	16.3-122		%REC	1	11/19/2014 3:57:37 PM	16427
Surr: Nitrobenzene-d5	69.4	45.3-117		%REC	1	11/19/2014 3:57:37 PM	16427
Surr: 2-Fluorobiphenyl	56.4	43-113		%REC	1	11/19/2014 3:57:37 PM	16427
Surr: 4-Terphenyl-d14	46.3	47.6-122	S	%REC	1	11/19/2014 3:57:37 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 4:48:56 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 4:48:56 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 4:48:56 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 4:48:56 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 4:48:56 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 4:48:56 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 4:48:56 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 4:48:56 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 4:48:56 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 4:48:56 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 4:48:56 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q4 2014
Collection Date: 11/13/2014 8:30:00 AM
Lab ID: 1411536-006
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 4:48:56 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 4:48:56 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 4:48:56 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 4:48:56 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 4:48:56 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 4:48:56 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 4:48:56 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 4:48:56 AM	R22653
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%REC	10	11/20/2014 4:48:56 AM	R22653
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	10	11/20/2014 4:48:56 AM	R22653
Surr: Dibromofluoromethane	90.0	70-130		%REC	10	11/20/2014 4:48:56 AM	R22653
Surr: Toluene-d8	93.8	70-130		%REC	10	11/20/2014 4:48:56 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	300000	1.0		µmhos/cm	100	11/21/2014 7:30:07 PM	R22735

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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q4 2014
Collection Date: 11/13/2014 8:30:00 AM
Lab ID: 1411536-006
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.40	1.68	H	pH units	1	11/20/2014 8:16:27 PM	R22708

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q4 2014
Collection Date: 11/12/2014 4:06:00 PM
Lab ID: 1411536-007
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	32	10	*	mg/L	100	11/14/2014 3:28:06 PM	R22558
Chloride	63000	2500		mg/L	5E	11/26/2014 3:26:58 PM	R22848
Bromide	32	10		mg/L	100	11/14/2014 3:28:06 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/14/2014 3:15:41 PM	R22558
Sulfate	17000	250		mg/L	500	11/25/2014 1:07:35 AM	R22782
Nitrate+Nitrite as N	ND	40		mg/L	200	11/24/2014 10:38:40 PM	R22782
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.16	0.010		mg/L	5	11/18/2014 6:36:20 PM	R22614
Cadmium	ND	0.010		mg/L	5	11/18/2014 6:36:20 PM	R22614
Calcium	1100	50		mg/L	50	11/24/2014 1:16:04 PM	R22752
Chromium	ND	0.030		mg/L	5	11/18/2014 6:36:20 PM	R22614
Copper	ND	0.030		mg/L	5	11/24/2014 1:14:15 PM	R22752
Iron	0.31	0.10	*	mg/L	5	11/24/2014 1:14:15 PM	R22752
Magnesium	1300	50		mg/L	50	11/24/2014 1:16:04 PM	R22752
Manganese	1.0	0.010	*	mg/L	5	11/18/2014 6:36:20 PM	R22614
Potassium	1800	50		mg/L	50	11/24/2014 1:16:04 PM	R22752
Silver	ND	0.025		mg/L	5	11/18/2014 6:36:20 PM	R22614
Sodium	34000	500		mg/L	500	11/24/2014 1:45:48 PM	R22752
Zinc	0.061	0.050		mg/L	5	11/18/2014 6:36:20 PM	R22614
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.16	0.010		mg/L	5	11/18/2014 4:31:55 PM	16416
Cadmium	ND	0.010		mg/L	5	11/18/2014 4:31:55 PM	16416
Chromium	ND	0.030		mg/L	5	11/18/2014 4:31:55 PM	16416
Copper	ND	0.030		mg/L	5	11/18/2014 4:31:55 PM	16416
Iron	0.38	0.10	*	mg/L	5	11/18/2014 4:31:55 PM	16416
Manganese	1.2	0.010	*	mg/L	5	11/18/2014 4:31:55 PM	16416
Silver	ND	0.025		mg/L	5	11/18/2014 4:31:55 PM	16416
Zinc	ND	0.050		mg/L	5	11/20/2014 4:54:02 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.10	0.050	*	mg/L	50	12/1/2014 4:20:30 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:40:09 PM	R22871
Selenium	ND	0.50	*	mg/L	50	12/1/2014 4:20:30 PM	R22871
Uranium	ND	0.050		mg/L	50	12/2/2014 5:44:36 PM	R22885
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.14	0.050	*	mg/L	50	12/3/2014 2:44:45 PM	16416
Lead	ND	0.050		mg/L	50	12/3/2014 2:44:45 PM	16416
Selenium	ND	0.50	*	mg/L	50	12/3/2014 2:44:45 PM	16416

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q4 2014
Collection Date: 11/12/2014 4:06:00 PM
Lab ID: 1411536-007
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Uranium	ND	0.050		mg/L	50	12/3/2014 2:44:45 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:19:47 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	89	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 4:25:20 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Bis(2-ethylhexyl)phthalate	13	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427

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Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 4:25:20 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 4:25:20 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 4:25:20 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 4:25:20 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 4:25:20 PM	16427

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q4 2014
Collection Date: 11/12/2014 4:06:00 PM
Lab ID: 1411536-007
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Surr: 2-Fluorophenol	43.7	17.6-104		%REC	1	11/19/2014 4:25:20 PM	16427
Surr: Phenol-d5	54.2	17.7-89.9		%REC	1	11/19/2014 4:25:20 PM	16427
Surr: 2,4,6-Tribromophenol	39.6	16.3-122		%REC	1	11/19/2014 4:25:20 PM	16427
Surr: Nitrobenzene-d5	58.7	45.3-117		%REC	1	11/19/2014 4:25:20 PM	16427
Surr: 2-Fluorobiphenyl	40.3	43-113	S	%REC	1	11/19/2014 4:25:20 PM	16427
Surr: 4-Terphenyl-d14	35.6	47.6-122	S	%REC	1	11/19/2014 4:25:20 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 5:18:43 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 5:18:43 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 5:18:43 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 5:18:43 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 5:18:43 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 5:18:43 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 5:18:43 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 5:18:43 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 5:18:43 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 5:18:43 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 5:18:43 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q4 2014
Collection Date: 11/12/2014 4:06:00 PM
Lab ID: 1411536-007
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 5:18:43 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 5:18:43 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 5:18:43 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 5:18:43 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 5:18:43 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 5:18:43 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 5:18:43 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 5:18:43 AM	R22653
Surr: 1,2-Dichloroethane-d4	103	70-130		%REC	10	11/20/2014 5:18:43 AM	R22653
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	10	11/20/2014 5:18:43 AM	R22653
Surr: Dibromofluoromethane	100	70-130		%REC	10	11/20/2014 5:18:43 AM	R22653
Surr: Toluene-d8	93.1	70-130		%REC	10	11/20/2014 5:18:43 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	180000	1.0		µmhos/cm	100	11/21/2014 7:34:33 PM	R22735

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q4 2014
Collection Date: 11/12/2014 4:06:00 PM
Lab ID: 1411536-007
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.74	1.68	H	pH units	1	11/20/2014 8:20:39 PM	R22708

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q4 2014
Collection Date: 11/12/2014 3:35:00 PM
Lab ID: 1411536-008
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	43	10	*	mg/L	100	11/14/2014 3:52:55 PM	R22558
Chloride	3000	100		mg/L	200	11/25/2014 1:20:00 AM	R22782
Bromide	2.1	1.0		mg/L	10	11/14/2014 3:40:31 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/14/2014 3:40:31 PM	R22558
Sulfate	1600	50		mg/L	100	11/14/2014 3:52:55 PM	R22558
Nitrate+Nitrite as N	2.5	2.0		mg/L	10	11/24/2014 11:28:18 PM	R22782
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Barium	0.11	0.020		mg/L	10	11/24/2014 1:18:05 PM	R22752
Cadmium	ND	0.020		mg/L	10	11/24/2014 1:18:05 PM	R22752
Calcium	130	10		mg/L	10	11/24/2014 1:18:05 PM	R22752
Chromium	ND	0.060		mg/L	10	11/24/2014 1:18:05 PM	R22752
Copper	ND	0.060		mg/L	10	11/24/2014 1:18:05 PM	R22752
Iron	2.2	0.20	*	mg/L	10	11/24/2014 1:18:05 PM	R22752
Magnesium	63	10		mg/L	10	11/24/2014 1:18:05 PM	R22752
Manganese	0.43	0.020	*	mg/L	10	11/24/2014 1:18:05 PM	R22752
Potassium	180	10		mg/L	10	11/24/2014 1:18:05 PM	R22752
Silver	ND	0.050		mg/L	10	11/24/2014 1:18:05 PM	R22752
Sodium	2500	50		mg/L	50	11/24/2014 1:47:34 PM	R22752
Zinc	ND	0.10		mg/L	10	11/24/2014 5:04:23 PM	R22755
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.14	0.0020		mg/L	1	11/18/2014 4:33:41 PM	16416
Cadmium	ND	0.0020		mg/L	1	11/18/2014 4:33:41 PM	16416
Chromium	0.018	0.0060		mg/L	1	11/18/2014 4:33:41 PM	16416
Copper	ND	0.0060		mg/L	1	11/18/2014 4:33:41 PM	16416
Iron	4.1	0.10	*	mg/L	5	11/18/2014 4:35:19 PM	16416
Manganese	0.44	0.0020	*	mg/L	1	11/18/2014 4:33:41 PM	16416
Silver	ND	0.0050		mg/L	1	11/18/2014 4:33:41 PM	16416
Zinc	0.019	0.010		mg/L	1	11/20/2014 4:38:30 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.021	0.020	*	mg/L	20	12/1/2014 3:43:15 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:43:15 PM	R22871
Selenium	ND	0.020		mg/L	20	12/1/2014 3:43:15 PM	R22871
Uranium	ND	0.020		mg/L	20	12/1/2014 5:13:13 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	ND	0.050	*	mg/L	50	12/3/2014 2:54:08 PM	16416
Lead	ND	0.050		mg/L	50	12/3/2014 2:54:08 PM	16416
Selenium	ND	0.050		mg/L	50	12/3/2014 2:54:08 PM	16416

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q4 2014
Collection Date: 11/12/2014 3:35:00 PM
Lab ID: 1411536-008
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Uranium	ND	0.050		mg/L	50	12/3/2014 2:54:08 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:21:36 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	<37.50	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 4:53:05 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Bis(2-ethylhexyl)phthalate	12	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q4 2014
Collection Date: 11/12/2014 3:35:00 PM
Lab ID: 1411536-008
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 4:53:05 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 4:53:05 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 4:53:05 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 4:53:05 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 4:53:05 PM	16427

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q4 2014
Collection Date: 11/12/2014 3:35:00 PM
Lab ID: 1411536-008
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Surr: 2-Fluorophenol	59.9	17.6-104		%REC	1	11/19/2014 4:53:05 PM	16427
Surr: Phenol-d5	53.6	17.7-89.9		%REC	1	11/19/2014 4:53:05 PM	16427
Surr: 2,4,6-Tribromophenol	81.5	16.3-122		%REC	1	11/19/2014 4:53:05 PM	16427
Surr: Nitrobenzene-d5	68.2	45.3-117		%REC	1	11/19/2014 4:53:05 PM	16427
Surr: 2-Fluorobiphenyl	66.1	43-113		%REC	1	11/19/2014 4:53:05 PM	16427
Surr: 4-Terphenyl-d14	74.6	47.6-122		%REC	1	11/19/2014 4:53:05 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 5:48:25 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 5:48:25 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 5:48:25 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 5:48:25 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 5:48:25 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 5:48:25 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 5:48:25 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 5:48:25 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 5:48:25 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 5:48:25 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 5:48:25 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653

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Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q4 2014
Collection Date: 11/12/2014 3:35:00 PM
Lab ID: 1411536-008
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 5:48:25 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 5:48:25 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 5:48:25 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 5:48:25 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 5:48:25 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 5:48:25 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 5:48:25 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 5:48:25 AM	R22653
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	10	11/20/2014 5:48:25 AM	R22653
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	10	11/20/2014 5:48:25 AM	R22653
Surr: Dibromofluoromethane	90.7	70-130		%REC	10	11/20/2014 5:48:25 AM	R22653
Surr: Toluene-d8	96.8	70-130		%REC	10	11/20/2014 5:48:25 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	12000	0.050		µmhos/cm	5	11/21/2014 7:38:59 PM	R22735

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q4 2014
Collection Date: 11/12/2014 3:35:00 PM
Lab ID: 1411536-008
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	8.24	1.68	H	pH units	1	11/20/2014 8:24:59 PM	R22708

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q4 2014
Collection Date: 11/12/2014 3:15:00 PM
Lab ID: 1411536-009
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Fluoride	38	10	*	mg/L	100	11/14/2014 4:17:45 PM	R22558
Chloride	1900	50		mg/L	100	11/26/2014 3:39:22 PM	R22848
Bromide	1.3	1.0		mg/L	10	11/14/2014 4:05:20 PM	R22558
Phosphorus, Orthophosphate (As P)	ND	5.0	H	mg/L	10	11/14/2014 4:05:20 PM	R22558
Sulfate	1200	50		mg/L	100	11/14/2014 4:17:45 PM	R22558
Nitrate+Nitrite as N	ND	2.0		mg/L	10	11/24/2014 11:40:42 PM	R22782
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **ELS**	
Barium	0.076	0.0020		mg/L	1	11/18/2014 6:41:46 PM	R22614
Cadmium	ND	0.0020		mg/L	1	11/18/2014 6:41:46 PM	R22614
Calcium	150	5.0		mg/L	5	11/24/2014 1:23:40 PM	R22752
Chromium	0.010	0.0060		mg/L	1	11/18/2014 6:41:46 PM	R22614
Copper	ND	0.0060		mg/L	1	11/24/2014 1:21:54 PM	R22752
Iron	1.3	0.10	*	mg/L	5	11/24/2014 1:23:40 PM	R22752
Magnesium	44	1.0		mg/L	1	11/24/2014 1:21:54 PM	R22752
Manganese	0.24	0.0020	*	mg/L	1	11/18/2014 6:41:46 PM	R22614
Potassium	150	5.0		mg/L	5	11/24/2014 1:23:40 PM	R22752
Silver	ND	0.0050		mg/L	1	11/18/2014 6:41:46 PM	R22614
Sodium	1600	20		mg/L	20	11/24/2014 1:25:44 PM	R22752
Zinc	0.023	0.010		mg/L	1	11/18/2014 6:41:46 PM	R22614
EPA METHOD 200.7: TOTAL METALS						Analyst: **ELS**	
Barium	0.087	0.0020		mg/L	1	11/18/2014 4:37:20 PM	16416
Cadmium	ND	0.0020		mg/L	1	11/18/2014 4:37:20 PM	16416
Chromium	0.011	0.0060		mg/L	1	11/18/2014 4:37:20 PM	16416
Copper	ND	0.0060		mg/L	1	11/18/2014 4:37:20 PM	16416
Iron	1.4	0.10	*	mg/L	5	11/18/2014 4:50:39 PM	16416
Manganese	0.27	0.0020	*	mg/L	1	11/18/2014 4:37:20 PM	16416
Silver	ND	0.0050		mg/L	1	11/18/2014 4:37:20 PM	16416
Zinc	0.019	0.010		mg/L	1	11/20/2014 4:40:06 PM	16416
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	ND	0.020	*	mg/L	20	12/1/2014 3:46:22 PM	R22871
Lead	ND	0.020		mg/L	20	12/1/2014 3:46:22 PM	R22871
Selenium	ND	0.020		mg/L	20	12/1/2014 3:46:22 PM	R22871
Uranium	ND	0.020		mg/L	20	12/1/2014 5:22:34 PM	R22871
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	ND	0.050		mg/L	50	12/3/2014 3:00:18 PM	16416
Lead	ND	0.050		mg/L	50	12/3/2014 3:00:18 PM	16416
Selenium	ND	0.050		mg/L	50	12/3/2014 3:00:18 PM	16416

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Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q4 2014
Collection Date: 11/12/2014 3:15:00 PM
Lab ID: 1411536-009
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Uranium	ND	0.050		mg/L	50	12/3/2014 3:00:18 PM	16416
EPA METHOD 245.1: MERCURY						Analyst: **MMD**	
Mercury	ND	0.00020		mg/L	1	11/25/2014 9:23:27 AM	16546
SM5210B: BOD						Analyst: **MRA**	
Biochemical Oxygen Demand	110	2.0		mg/L	1	11/19/2014 1:44:00 PM	16392
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Acenaphthylene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Aniline	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Anthracene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Azobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Benz(a)anthracene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Benzo(a)pyrene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Benzo(b)fluoranthene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Benzo(k)fluoranthene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Benzoic acid	ND	20		µg/L	1	11/19/2014 5:20:46 PM	16427
Benzyl alcohol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Bis(2-ethylhexyl)phthalate	12	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Butyl benzyl phthalate	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Carbazole	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4-Chloroaniline	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2-Chloronaphthalene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2-Chlorophenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Chrysene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Di-n-butyl phthalate	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Di-n-octyl phthalate	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Dibenzofuran	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
1,2-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
1,3-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
1,4-Dichlorobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427

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

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q4 2014
Collection Date: 11/12/2014 3:15:00 PM
Lab ID: 1411536-009
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
3,3´-Dichlorobenzidine	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Diethyl phthalate	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Dimethyl phthalate	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2,4-Dichlorophenol	ND	20		µg/L	1	11/19/2014 5:20:46 PM	16427
2,4-Dimethylphenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	11/19/2014 5:20:46 PM	16427
2,4-Dinitrophenol	ND	20		µg/L	1	11/19/2014 5:20:46 PM	16427
2,4-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2,6-Dinitrotoluene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Fluoranthene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Fluorene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Hexachlorobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Hexachlorobutadiene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Hexachloroethane	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Isophorone	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
1-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2-Methylnaphthalene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2-Methylphenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
3+4-Methylphenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
N-Nitrosodimethylamine	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Naphthalene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2-Nitroaniline	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
3-Nitroaniline	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4-Nitroaniline	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Nitrobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2-Nitrophenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
4-Nitrophenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Pentachlorophenol	ND	20		µg/L	1	11/19/2014 5:20:46 PM	16427
Phenanthrene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Phenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Pyrene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
Pyridine	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/19/2014 5:20:46 PM	16427

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q4 2014
Collection Date: 11/12/2014 3:15:00 PM
Lab ID: 1411536-009
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Surr: 2-Fluorophenol	59.0	17.6-104		%REC	1	11/19/2014 5:20:46 PM	16427
Surr: Phenol-d5	52.1	17.7-89.9		%REC	1	11/19/2014 5:20:46 PM	16427
Surr: 2,4,6-Tribromophenol	71.3	16.3-122		%REC	1	11/19/2014 5:20:46 PM	16427
Surr: Nitrobenzene-d5	67.9	45.3-117		%REC	1	11/19/2014 5:20:46 PM	16427
Surr: 2-Fluorobiphenyl	67.8	43-113		%REC	1	11/19/2014 5:20:46 PM	16427
Surr: 4-Terphenyl-d14	73.0	47.6-122		%REC	1	11/19/2014 5:20:46 PM	16427
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
Benzene	ND	5.0		µg/L	10	11/20/2014 6:18:08 AM	R22653
Toluene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Ethylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2,4-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,3,5-Trimethylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Naphthalene	ND	20		µg/L	10	11/20/2014 6:18:08 AM	R22653
1-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 6:18:08 AM	R22653
2-Methylnaphthalene	ND	40		µg/L	10	11/20/2014 6:18:08 AM	R22653
Acetone	ND	100		µg/L	10	11/20/2014 6:18:08 AM	R22653
Bromobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Bromodichloromethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Bromoform	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Bromomethane	ND	30		µg/L	10	11/20/2014 6:18:08 AM	R22653
2-Butanone	ND	100		µg/L	10	11/20/2014 6:18:08 AM	R22653
Carbon disulfide	ND	100		µg/L	10	11/20/2014 6:18:08 AM	R22653
Carbon Tetrachloride	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Chlorobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Chloroethane	ND	20		µg/L	10	11/20/2014 6:18:08 AM	R22653
Chloroform	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Chloromethane	ND	30		µg/L	10	11/20/2014 6:18:08 AM	R22653
2-Chlorotoluene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
4-Chlorotoluene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
cis-1,2-DCE	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/20/2014 6:18:08 AM	R22653
Dibromochloromethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Dibromomethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,3-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q4 2014
Collection Date: 11/12/2014 3:15:00 PM
Lab ID: 1411536-009
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **KJH**	
1,4-Dichlorobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Dichlorodifluoromethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1-Dichloroethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1-Dichloroethene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2-Dichloropropane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,3-Dichloropropane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
2,2-Dichloropropane	ND	20		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1-Dichloropropene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Hexachlorobutadiene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
2-Hexanone	ND	100		µg/L	10	11/20/2014 6:18:08 AM	R22653
Isopropylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
4-Isopropyltoluene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
4-Methyl-2-pentanone	ND	100		µg/L	10	11/20/2014 6:18:08 AM	R22653
Methylene Chloride	ND	30		µg/L	10	11/20/2014 6:18:08 AM	R22653
n-Butylbenzene	ND	30		µg/L	10	11/20/2014 6:18:08 AM	R22653
n-Propylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
sec-Butylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Styrene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
tert-Butylbenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/20/2014 6:18:08 AM	R22653
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
trans-1,2-DCE	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1,1-Trichloroethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,1,2-Trichloroethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Trichloroethene (TCE)	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Trichlorofluoromethane	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
1,2,3-Trichloropropane	ND	20		µg/L	10	11/20/2014 6:18:08 AM	R22653
Vinyl chloride	ND	10		µg/L	10	11/20/2014 6:18:08 AM	R22653
Xylenes, Total	ND	15		µg/L	10	11/20/2014 6:18:08 AM	R22653
Surr: 1,2-Dichloroethane-d4	86.3	70-130		%REC	10	11/20/2014 6:18:08 AM	R22653
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	10	11/20/2014 6:18:08 AM	R22653
Surr: Dibromofluoromethane	90.5	70-130		%REC	10	11/20/2014 6:18:08 AM	R22653
Surr: Toluene-d8	103	70-130		%REC	10	11/20/2014 6:18:08 AM	R22653
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	7600	0.010		µmhos/cm	1	11/20/2014 8:29:10 PM	R22708

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q4 2014
Collection Date: 11/12/2014 3:15:00 PM
Lab ID: 1411536-009
Matrix: AQUEOUS
Received Date: 11/13/2014 3:48:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
SM4500-H+B: PH						Analyst: **JRR**	
pH	7.84	1.68	H	pH units	1	11/20/2014 8:29:10 PM	R22708

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-01

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-002G EP-5

Project # :

Collected By :
Collection Date : 11/12/14 14:20

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	660	50.	mg/l	410.4	11/19/14	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-02

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-003G EP-6

Project # :

Collected By :
Collection Date : 11/12/14 14:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	810	50.	mg/l	410.4	11/19/14	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-03

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-004G EP-7

Project # :

Collected By :
Collection Date : 11/12/14 16:24

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	4400	100	mg/l	410.4	11/19/14	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-04

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-005G EP-8

Project # :

Collected By :
Collection Date : 11/12/14 16:53

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	4100	100	mg/l	410.4	11/19/14	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-05

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-006G EP-9

Project # :

Collected By :
Collection Date : 11/13/14 08:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	3900	1000	mg/l	410.4	11/19/14	100

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-06

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-007G EP-11

Project # :

Collected By :
Collection Date : 11/12/14 16:06

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	4700	100	mg/l	410.4	11/19/14	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-07

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-008G EP-12A

Project # :

Collected By :
Collection Date : 11/12/14 15:35

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	450	10.	mg/l	410.4	11/19/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

ESC
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REPORT OF ANALYSIS

November 19, 2014

Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L733939-08

Date Received : November 15, 2014
Description :

Site ID :

Sample ID : 1411536-009G EP-12B

Project # :

Collected By :
Collection Date : 11/12/14 15:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	410	10.	mg/l	410.4	11/19/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 11/19/14 15:37 Printed: 11/19/14 15:38

ESC
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Hall Environmental Analysis Laboratory

4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L733939

November 19, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
COD	< 10	mg/l			WG755289	11/19/14 12:12

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
COD	mg/l	410.	410.	0.0	5	L733939-08	WG755289
COD	mg/l	9600	9600	0.0	5	L733485-01	WG755289

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
COD	mg/l	183	189.	103.	90-110	WG755289

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
COD	mg/l	189.	189.	103.	90-110	0.0	5	WG755289

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
COD	mg/l	699.	260.	400	110.	90-110	L733812-01	WG755289

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
COD	mg/l	700.	699.	110.	90-110	0.143	5	L733812-01	WG755289

Batch number /Run number / Sample number cross reference

WG755289: R3005377: L733939-01 02 03 04 05 06 07 08

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22599**	RunNo: **22599**
Prep Date:	Analysis Date: **11/16/2014**	SeqNo: **666147** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22599**	RunNo: **22599**
Prep Date:	Analysis Date: **11/16/2014**	SeqNo: **666149** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22599**	RunNo: **22599**
Prep Date:	Analysis Date: **11/16/2014**	SeqNo: **666151** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	99.2	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.5	85	115			
Chromium	0.48	0.0060	0.5000	0	96.9	85	115			
Copper	0.49	0.0060	0.5000	0	98.1	85	115			
Iron	0.48	0.020	0.5000	0	95.4	85	115			
Magnesium	45	1.0	50.00	0	89.1	85	115			
Manganese	0.47	0.0020	0.5000	0	94.7	85	115			
Potassium	43	1.0	50.00	0	86.4	85	115			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**
10-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22599**	RunNo: **22599**
Prep Date:	Analysis Date: **11/16/2014**	SeqNo: **666151** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.11	0.0050	0.1000	0	105	85	115			
Zinc	0.50	0.010	0.5000	0	99.2	85	115			

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22599**	RunNo: **22599**
Prep Date:	Analysis Date: **11/16/2014**	SeqNo: **666152** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.55	0.0020	0.5000	0	109	85	115			
Cadmium	0.55	0.0020	0.5000	0	110	85	115			
Chromium	0.54	0.0060	0.5000	0	108	85	115			
Copper	0.55	0.0060	0.5000	0	109	85	115			
Iron	0.53	0.020	0.5000	0	107	85	115			
Magnesium	56	1.0	50.00	0	112	85	115			
Manganese	0.52	0.0020	0.5000	0	104	85	115			
Potassium	54	1.0	50.00	0	109	85	115			
Silver	0.12	0.0050	0.1000	0	117	85	115			S
Zinc	0.54	0.010	0.5000	0	109	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22614**	RunNo: **22614**
Prep Date:	Analysis Date: **11/18/2014**	SeqNo: **666850** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22614**	RunNo: **22614**
Prep Date:	Analysis Date: **11/18/2014**	SeqNo: **666851** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.6	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.9	85	115			
Chromium	0.48	0.0060	0.5000	0	96.2	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22614**	RunNo: **22614**
Prep Date:	Analysis Date: **11/18/2014**	SeqNo: **666851** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.49	0.0060	0.5000	0	97.7	85	115			
Manganese	0.47	0.0020	0.5000	0	94.4	85	115			
Silver	0.10	0.0050	0.1000	0	105	85	115			
Zinc	0.48	0.010	0.5000	0	97.0	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22752**	RunNo: **22752**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671318** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22752**	RunNo: **22752**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671319** 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	97.0	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.9	85	115			
Calcium	52	1.0	50.00	0	104	85	115			
Chromium	0.48	0.0060	0.5000	0	96.5	85	115			
Copper	0.48	0.0060	0.5000	0	96.0	85	115			
Iron	0.49	0.020	0.5000	0	98.5	85	115			
Magnesium	53	1.0	50.00	0	106	85	115			
Manganese	0.47	0.0020	0.5000	0	93.7	85	115			
Potassium	51	1.0	50.00	0	101	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Sodium	52	1.0	50.00	0	104	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22752**	RunNo: **22752**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671320** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22752**	RunNo: **22752**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671321** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.51	0.0060	0.5000	0	102	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	98.8	85	115			
Potassium	49	1.0	50.00	0	97.7	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Sodium	50	1.0	50.00	0	99.6	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22755**	RunNo: **22755**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671448** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	ND	0.010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22755**	RunNo: **22755**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **671449** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.48	0.010	0.5000	0	96.3	85	115			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB-16416**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW**	Batch ID: **16416**	RunNo: **22614**
Prep Date: **11/17/2014**	Analysis Date: **11/18/2014**	SeqNo: **666852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-16416**	SampType: **LCS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW**	Batch ID: **16416**	RunNo: **22614**
Prep Date: **11/17/2014**	Analysis Date: **11/18/2014**	SeqNo: **666853** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Copper	0.51	0.0060	0.5000	0	101	85	115			
Iron	0.50	0.020	0.5000	0	101	85	115			
Manganese	0.49	0.0020	0.5000	0	98.1	85	115			
Silver	0.11	0.0050	0.1000	0	111	85	115			
Zinc	0.50	0.010	0.5000	0	101	85	115			

Sample ID **1411536-009FMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **EP-12B**	Batch ID: **16416**	RunNo: **22614**
Prep Date: **11/17/2014**	Analysis Date: **11/18/2014**	SeqNo: **666915** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.57	0.0020	0.5000	0.08749	96.3	70	130			
Cadmium	0.50	0.0020	0.5000	0	99.7	70	130			
Chromium	0.50	0.0060	0.5000	0.01112	97.6	70	130			
Copper	0.57	0.0060	0.5000	0	114	70	130			
Manganese	0.73	0.0020	0.5000	0.2661	92.6	70	130			
Silver	0.11	0.0050	0.1000	0	114	70	130			

Sample ID **1411536-009FMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **EP-12B**	Batch ID: **16416**	RunNo: **22614**
Prep Date: **11/17/2014**	Analysis Date: **11/18/2014**	SeqNo: **666916** 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
- O RSD is greater than RSDlimit
- 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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**1411536-009FMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Total Metals**				
Client ID:	**EP-12B**	Batch ID:	**16416**		RunNo:	**22614**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666916**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.56	0.0020	0.5000	0.08749	95.2	70	130	0.945	20	
Cadmium	0.49	0.0020	0.5000	0	98.7	70	130	0.994	20	
Chromium	0.50	0.0060	0.5000	0.01112	97.1	70	130	0.518	20	
Copper	0.57	0.0060	0.5000	0	113	70	130	0.490	20	
Manganese	0.72	0.0020	0.5000	0.2661	91.0	70	130	1.07	20	
Silver	0.11	0.0050	0.1000	0	113	70	130	0.643	20	

Sample ID	**1411536-009FMS**	SampType:	**MS**		TestCode:	**EPA Method 200.7: Total Metals**				
Client ID:	**EP-12B**	Batch ID:	**16416**		RunNo:	**22614**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666918**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.8	0.10	0.5000	1.392	90.6	70	130			

Sample ID	**1411536-009FMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Total Metals**				
Client ID:	**EP-12B**	Batch ID:	**16416**		RunNo:	**22614**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666919**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	1.9	0.10	0.5000	1.392	91.8	70	130	0.327	20	

Sample ID	**1411536-009FMS**	SampType:	**MS**		TestCode:	**EPA Method 200.7: Total Metals**				
Client ID:	**EP-12B**	Batch ID:	**16416**		RunNo:	**22687**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/20/2014**		SeqNo:	**669131**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.48	0.010	0.5000	0.01862	93.0	70	130			

Sample ID	**1411536-009FMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Total Metals**				
Client ID:	**EP-12B**	Batch ID:	**16416**		RunNo:	**22687**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/20/2014**		SeqNo:	**669132**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.50	0.010	0.5000	0.01862	95.8	70	130	2.79	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22871**	RunNo: **22871**
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.7	85	115			
Selenium	0.024	0.0010	0.02500	0	97.6	85	115			

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22871**	RunNo: **22871**
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675137** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.023	0.0010	0.02500	0	92.9	85	115			
Uranium	0.023	0.0010	0.02500	0	91.5	85	115			

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R22871**	RunNo: **22871**
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675138** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.023	0.0010	0.02500	0	90.2	85	115			
Lead	0.023	0.0010	0.02500	0	93.8	85	115			
Selenium	0.022	0.0010	0.02500	0	88.9	85	115			
Uranium	0.023	0.0010	0.02500	0	92.0	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22871**	RunNo: **22871**
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675139** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R22871**	RunNo: **22871**
Prep Date:	Analysis Date: **12/1/2014**	SeqNo: **675140** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Dissolved Metals**					
Client ID:	**PBW**	Batch ID:	**R22871**	RunNo:	**22871**					
Prep Date:		Analysis Date:	**12/1/2014**	SeqNo:	**675141**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA 200.8: Dissolved Metals**					
Client ID:	**LCSW**	Batch ID:	**R22885**	RunNo:	**22885**					
Prep Date:		Analysis Date:	**12/2/2014**	SeqNo:	**675799**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.026	0.0010	0.02500	0	103	85	115			

Sample ID	**LCS**	SampType:	**LCS**	TestCode:	**EPA 200.8: Dissolved Metals**					
Client ID:	**LCSW**	Batch ID:	**R22885**	RunNo:	**22885**					
Prep Date:		Analysis Date:	**12/2/2014**	SeqNo:	**675800**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	0.026	0.0010	0.02500	0	102	85	115			

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Dissolved Metals**					
Client ID:	**PBW**	Batch ID:	**R22885**	RunNo:	**22885**					
Prep Date:		Analysis Date:	**12/2/2014**	SeqNo:	**675801**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	0.0010								

Sample ID	**MB**	SampType:	**MBLK**	TestCode:	**EPA 200.8: Dissolved Metals**					
Client ID:	**PBW**	Batch ID:	**R22885**	RunNo:	**22885**					
Prep Date:		Analysis Date:	**12/2/2014**	SeqNo:	**675802**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**LLLCS-16416**	SampType:	**LCSLL**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**BatchQC**	Batch ID:	**16416**		RunNo:	**22609**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666765**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	98.5	85	115			
Lead	0.026	0.0010	0.02500	0	106	85	115			
Selenium	0.024	0.0010	0.02500	0	96.6	85	115			
Uranium	0.026	0.0010	0.02500	0	106	85	115			

Sample ID	**MB-16416**	SampType:	**MBLK**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**PBW**	Batch ID:	**16416**		RunNo:	**22609**				
Prep Date:	**11/17/2014**	Analysis Date:	**11/18/2014**		SeqNo:	**666767**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**MB-16546**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**16546**	RunNo:	**22791**					
Prep Date:	**11/24/2014**	Analysis Date:	**11/25/2014**	SeqNo:	**672552**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-16546**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**LCSW**	Batch ID:	**16546**	RunNo:	**22791**					
Prep Date:	**11/24/2014**	Analysis Date:	**11/25/2014**	SeqNo:	**672553**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0	109	80	120			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**
10-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22558**	RunNo: **22558**
Prep Date:	Analysis Date: **11/14/2014**	SeqNo: **665153** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22558**	RunNo: **22558**
Prep Date:	Analysis Date: **11/14/2014**	SeqNo: **665154** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	101	90	110			
Nitrogen, Nitrite (As N)	0.99	0.10	1.000	0	99.4	90	110			
Bromide	2.3	0.10	2.500	0	94.0	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	100	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.9	90	110			
Sulfate	10	0.50	10.00	0	104	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22558**	RunNo: **22558**
Prep Date:	Analysis Date: **11/14/2014**	SeqNo: **665207** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22558**	RunNo: **22558**
Prep Date:	Analysis Date: **11/14/2014**	SeqNo: **665208** 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			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	97.3	90	110			
Bromide	2.3	0.10	2.500	0	91.0	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	97.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22558**	RunNo: **22558**
Prep Date:	Analysis Date: **11/14/2014**	SeqNo: **665208** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Orthophosphate (As P	4.7	0.50	5.000	0	95.0	90	110			
Sulfate	9.4	0.50	10.00	0	93.8	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22782**	RunNo: **22782**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **672326** 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								
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22782**	RunNo: **22782**
Prep Date:	Analysis Date: **11/24/2014**	SeqNo: **672327** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.5	0.50	5.000	0	90.3	90	110			
Sulfate	9.3	0.50	10.00	0	92.9	90	110			
Nitrate+Nitrite as N	3.3	0.20	3.500	0	94.6	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22802**	RunNo: **22802**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672863** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22802**	RunNo: **22802**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672864** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.9	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22802**	RunNo: **22802**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672919** 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
- O RSD is greater than RSDlimit
- 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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22802**	RunNo: **22802**
Prep Date:	Analysis Date: **11/25/2014**	SeqNo: **672919** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R22802**	RunNo: **22802**
Prep Date:	Analysis Date: **11/26/2014**	SeqNo: **672920** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.3	0.20	3.500	0	93.0	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R22848**	RunNo: **22848**
Prep Date:	Analysis Date: **11/26/2014**	SeqNo: **674415** 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: **R22848**	RunNo: **22848**
Prep Date:	Analysis Date: **11/26/2014**	SeqNo: **674416** 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	98.8	90	110			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**
10-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668056** 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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **5mL-rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668056** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	10		10.00		99.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.4	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: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668058** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	23	1.0	20.00	0	116	80	120			
Chlorobenzene	21	1.0	20.00	0	104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668058** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	117	82.6	131			
Trichloroethene (TCE)	19	1.0	20.00	0	96.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.0	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.4	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.1	70	130			
Surr: Toluene-d8	9.6		10.00		96.5	70	130			

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668101** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**
10-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668101** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	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	9.8		10.00		97.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **b2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668101** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.8	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID **100ng lcs2**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R22653**	RunNo: **22653**
Prep Date:	Analysis Date: **11/19/2014**	SeqNo: **668103** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	122	70	130			
Toluene	24	1.0	20.00	0	118	80	120			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	26	1.0	20.00	0	129	82.6	131			
Trichloroethene (TCE)	22	1.0	20.00	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		99.7	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.2	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**
10-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **mb-16427**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **16427**	RunNo: **22650**
Prep Date: **11/18/2014**	Analysis Date: **11/19/2014**	SeqNo: **667984** 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								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **mb-16427**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **16427**	RunNo: **22650**
Prep Date: **11/18/2014**	Analysis Date: **11/19/2014**	SeqNo: **667984** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
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-Fluorophenol	130		200.0		67.4	17.6	104			
Surr: Phenol-d5	120		200.0		62.3	17.7	89.9			
Surr: 2,4,6-Tribromophenol	110		200.0		56.7	16.3	122			
Surr: Nitrobenzene-d5	68		100.0		68.0	45.3	117			
Surr: 2-Fluorobiphenyl	67		100.0		67.5	43	113			
Surr: 4-Terphenyl-d14	72		100.0		72.3	47.6	122			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **lcs-16427**	SampType: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW**	Batch ID: **16427**	RunNo: **22650**
Prep Date: **11/18/2014**	Analysis Date: **11/19/2014**	SeqNo: **667985** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	62	10	100.0	0	62.4	47.9	114			
4-Chloro-3-methylphenol	140	10	200.0	0	71.1	51.7	122			
2-Chlorophenol	140	10	200.0	0	68.2	40.7	113			
1,4-Dichlorobenzene	60	10	100.0	0	60.1	39.6	99.9			
2,4-Dinitrotoluene	56	10	100.0	0	56.4	40.8	113			
N-Nitrosodi-n-propylamine	67	10	100.0	0	66.7	51.2	111			
4-Nitrophenol	140	10	200.0	0	70.4	15.7	86.9			
Pentachlorophenol	98	20	200.0	0	49.1	21.6	104			
Phenol	140	10	200.0	0	69.2	28.6	71.7			
Pyrene	61	10	100.0	0	60.6	54.2	128			
1,2,4-Trichlorobenzene	59	10	100.0	0	59.4	40.9	101			
Surr: 2-Fluorophenol	120		200.0		61.4	17.6	104			
Surr: Phenol-d5	120		200.0		62.2	17.7	89.9			
Surr: 2,4,6-Tribromophenol	130		200.0		64.7	16.3	122			
Surr: Nitrobenzene-d5	60		100.0		60.4	45.3	117			
Surr: 2-Fluorobiphenyl	58		100.0		58.2	43	113			
Surr: 4-Terphenyl-d14	70		100.0		70.2	47.6	122			

Sample ID **lcsd-16427**	SampType: **LCSD**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02**	Batch ID: **16427**	RunNo: **22650**
Prep Date: **11/18/2014**	Analysis Date: **11/19/2014**	SeqNo: **667986** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	73	10	100.0	0	73.4	47.9	114	16.1	27.2	
4-Chloro-3-methylphenol	160	10	200.0	0	80.2	51.7	122	12.0	25.9	
2-Chlorophenol	160	10	200.0	0	77.8	40.7	113	13.2	22.5	
1,4-Dichlorobenzene	70	10	100.0	0	69.7	39.6	99.9	14.8	24.6	
2,4-Dinitrotoluene	70	10	100.0	0	69.6	40.8	113	20.9	25.3	
N-Nitrosodi-n-propylamine	78	10	100.0	0	77.7	51.2	111	15.2	23.6	
4-Nitrophenol	170	10	200.0	0	85.3	15.7	86.9	19.1	34.7	
Pentachlorophenol	110	20	200.0	0	57.5	21.6	104	15.7	32.8	
Phenol	160	10	200.0	0	81.8	28.6	71.7	16.7	25.5	S
Pyrene	63	10	100.0	0	63.2	54.2	128	4.14	31.4	
1,2,4-Trichlorobenzene	66	10	100.0	0	66.0	40.9	101	10.6	25.9	
Surr: 2-Fluorophenol	150		200.0		75.0	17.6	104	0	0	
Surr: Phenol-d5	140		200.0		72.2	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	140		200.0		71.8	16.3	122	0	0	
Surr: Nitrobenzene-d5	67		100.0		67.1	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	69		100.0		69.4	43	113	0	0	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**lcsd-16427**	SampType:	**LCSD**		TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**LCSS02**	Batch ID:	**16427**		RunNo:	**22650**				
Prep Date:	**11/18/2014**	Analysis Date:	**11/19/2014**		SeqNo:	**667986**	Units:	**µg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	75		100.0		74.6	47.6	122	0	0	

Sample ID	**mb-16481**	SampType:	**MBLK**		TestCode:	**EPA Method 8270C: Semivolatiles**				
Client ID:	**PBW**	Batch ID:	**16481**		RunNo:	**22682**				
Prep Date:	**11/19/2014**	Analysis Date:	**11/20/2014**		SeqNo:	**668827**	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	10	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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**
10-Dec-14

Client: Western Refining Southwest, Gallup
Project: Q4 2014

Sample ID **mb-16481**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **16481**	RunNo: **22682**
Prep Date: **11/19/2014**	Analysis Date: **11/20/2014**	SeqNo: **668827** Units: **µg/L**

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

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **mb-16481**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **16481**	RunNo: **22682**
Prep Date: **11/19/2014**	Analysis Date: **11/20/2014**	SeqNo: **668827** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	150		200.0		72.8	17.6	104			
Surr: Phenol-d5	140		200.0		70.0	17.7	89.9			
Surr: 2,4,6-Tribromophenol	160		200.0		81.6	16.3	122			
Surr: Nitrobenzene-d5	70		100.0		69.6	45.3	117			
Surr: 2-Fluorobiphenyl	74		100.0		74.0	43	113			
Surr: 4-Terphenyl-d14	99		100.0		99.0	47.6	122			

Sample ID **lcs-16481**	SampType: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW**	Batch ID: **16481**	RunNo: **22682**
Prep Date: **11/19/2014**	Analysis Date: **11/20/2014**	SeqNo: **668828** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	80	10	100.0	0	79.8	47.9	114			
4-Chloro-3-methylphenol	180	10	200.0	0	88.4	51.7	122			
2-Chlorophenol	150	10	200.0	0	73.0	40.7	113			
1,4-Dichlorobenzene	70	10	100.0	0	69.9	39.6	99.9			
2,4-Dinitrotoluene	70	10	100.0	0	70.1	40.8	113			
N-Nitrosodi-n-propylamine	79	10	100.0	0	79.0	51.2	111			
4-Nitrophenol	170	10	200.0	0	85.4	15.7	86.9			
Pentachlorophenol	120	20	200.0	0	60.0	21.6	104			
Phenol	160	10	200.0	0	80.1	28.6	71.7			S
Pyrene	76	10	100.0	0	75.8	54.2	128			
1,2,4-Trichlorobenzene	72	10	100.0	0	72.1	40.9	101			
Surr: 2-Fluorophenol	130		200.0		63.8	17.6	104			
Surr: Phenol-d5	130		200.0		66.5	17.7	89.9			
Surr: 2,4,6-Tribromophenol	160		200.0		82.5	16.3	122			
Surr: Nitrobenzene-d5	67		100.0		66.8	45.3	117			
Surr: 2-Fluorobiphenyl	72		100.0		72.0	43	113			
Surr: 4-Terphenyl-d14	81		100.0		81.0	47.6	122			

Sample ID **lcsd-16481**	SampType: **LCSD**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSS02**	Batch ID: **16481**	RunNo: **22682**
Prep Date: **11/19/2014**	Analysis Date: **11/20/2014**	SeqNo: **668829** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	82.9	47.9	114	3.83	27.2	
4-Chloro-3-methylphenol	160	10	200.0	0	82.2	51.7	122	7.36	25.9	
2-Chlorophenol	140	10	200.0	0	71.6	40.7	113	1.87	22.5	
1,4-Dichlorobenzene	69	10	100.0	0	69.3	39.6	99.9	0.948	24.6	
2,4-Dinitrotoluene	71	10	100.0	0	70.8	40.8	113	0.966	25.3	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID	**lcsd-16481**	SampType:	**LCSD**	TestCode:	**EPA Method 8270C: Semivolatiles**					
Client ID:	**LCSS02**	Batch ID:	**16481**	RunNo:	**22682**					
Prep Date:	**11/19/2014**	Analysis Date:	**11/20/2014**	SeqNo:	**668829**	Units:	**µg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	77	10	100.0	0	77.0	51.2	111	2.61	23.6	
4-Nitrophenol	180	10	200.0	0	88.7	15.7	86.9	3.77	34.7	S
Pentachlorophenol	130	20	200.0	0	63.1	21.6	104	4.97	32.8	
Phenol	160	10	200.0	0	78.3	28.6	71.7	2.37	25.5	S
Pyrene	81	10	100.0	0	81.1	54.2	128	6.83	31.4	
1,2,4-Trichlorobenzene	70	10	100.0	0	70.0	40.9	101	2.96	25.9	
Surr: 2-Fluorophenol	120		200.0		62.4	17.6	104	0	0	
Surr: Phenol-d5	130		200.0		64.7	17.7	89.9	0	0	
Surr: 2,4,6-Tribromophenol	170		200.0		85.0	16.3	122	0	0	
Surr: Nitrobenzene-d5	66		100.0		66.0	45.3	117	0	0	
Surr: 2-Fluorobiphenyl	74		100.0		74.2	43	113	0	0	
Surr: 4-Terphenyl-d14	89		100.0		89.4	47.6	122	0	0	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411536**

10-Dec-14

Client: Western Refining Southwest, Gallup

Project: Q4 2014

Sample ID **MB-16392**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **16392**	RunNo: **22688**							
Prep Date: **11/14/2014**	Analysis Date: **11/19/2014**	SeqNo: **669192**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **MB--16392**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **16392**	RunNo: **22688**							
Prep Date: **11/14/2014**	Analysis Date: **11/19/2014**	SeqNo: **669193**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **LCS-16392**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **16392**	RunNo: **22688**							
Prep Date: **11/14/2014**	Analysis Date: **11/19/2014**	SeqNo: **669194**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	114	89.6	126			

Sample ID **LCSD-16392**	SampType: **LCSD**	TestCode: **SM5210B: BOD**							
Client ID: **LCSS02**	Batch ID: **16392**	RunNo: **22688**							
Prep Date: **11/14/2014**	Analysis Date: **11/19/2014**	SeqNo: **669195**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	115	89.6	126	0.661	31.9	

Sample ID **1411536-002CDUP**	SampType: **DUP**	TestCode: **SM5210B: BOD**							
Client ID: **EP-5**	Batch ID: **16392**	RunNo: **22688**							
Prep Date: **11/14/2014**	Analysis Date: **11/19/2014**	SeqNo: **669197**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	<20.55	2.0						0	20	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Western Refining Gallup Work Order Number: 1411536 RcptNo: 1

Received by/date: 11/13/14

Logged By: **Ashley Gallegos** 11/13/2014 3:48:00 PM

Completed By: **Ashley Gallegos** 11/14/2014 8:19:07 AM

Reviewed By: 11/14/14 @ 08:30

Chain of Custody

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

Log In

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

✓ metals analysis, added 1 ml HNO3 to <0.08F for acceptable pH. Held in login for 24 hours. -CS 11/14/14

# of preserved bottles checked for pH: 32 (<2 or >12 unless noted)

Adjusted? yes

Checked by: CS

Special Handling (if applicable)

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

Person Notified: ____ Date: ____

By Whom: ____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: ____

Client Instructions: ____

17. Additional remarks: Poured off from each BOD bottle for 300 analysis (unpreserved 500 ml) -CS 11/14/14

18. **Cooler Information**

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

Chain-of-Custody Record

Client: Western Refining Company

GALLUP REFINERY

Mailing Address:

2 Giant Crossing Road, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-863-0930

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

Q4 2014

Project #:

Evaporation Ponds

Project Manager:

C. JOHNSON (cheryl.johnson@wnr.com)

Sampler:

On Ice: X Yes ☐ No

Sample Temperature: 4°

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 (AT 11/13/14, A9)	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411536	8260 + MTBE	8270 + phenols	WQCC metals - total	WQCC metals - dissolved (filtered)	BOD / COD	General Chemistry	e-coli							Air Bubbles (Y or N)
			~~EP-1~~																	
			~~EP-2~~																	
11-12-14	1715		~~EP-3~~ FB-111214-2	3		-001	X													
			~~EP-4 FB~~																	
11-12-14	1420		EP-5	9		-002	X	X	X	X	X	X								
11-12-14	1445		EP-6	9		-003	X	X	X	X	X	X								
11-12-14	1624		EP-7	9		-004	X	X	X	X	X	X								
11-12-14	1653		EP-8	9		-005	X	X	X	X	X	X								
11-13-14	830		EP-9	9		-006	X	X	X	X	X	X								
11-12-14	1606		EP-11	9		-007	X	X	X	X	X	X								
11-12-14	1535		EP-12A	9		-008	X	X	X	X	X	X								
11-12-14	1515		EP-12B	9		-009	X	X	X	X	X	X								
~~11-12-14~~			~~BD to BD 111214~~	1		~~-010~~		X	AT 11/17/14											

Date:	Time:	Relinquished by:	Received by:	Date	Time
11-13-14	1100	Rox Lovato/Rox Lovato		11/13/14	1:00
Date:	Time:	Relinquished by:	Received by:	Date	Time
11/13/14	1548			11/13/14	1548

Remarks:

Gen Chem: ec, pH, Cations/Anions did not receive BD sample AT 11/17/14

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocol. Pertinent sampling information is located on the attached COC. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 11, 2014

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q1-2014 Groundwater Sampling OrderNo.: 1403216

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 10 sample(s) on 3/5/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order: **1403216**
Date Reported: **3/11/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Q1-2014 Groundwater Sampling
Lab Order: 1403216

Lab ID: 1403216-001 **Collection Date:** 3/5/2014 9:10:00 AM
Client Sample ID: EP-1 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	5830	200	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-002 **Collection Date:** 3/5/2014 9:40:00 AM
Client Sample ID: STP-1 to EP-2 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	2780	200	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-003 **Collection Date:** 3/5/2014 10:20:00 AM
Client Sample ID: EP-2 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	5310	200	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-004 **Collection Date:** 3/5/2014 11:00:00 AM
Client Sample ID: EP-12B **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	5670	200	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-005 **Collection Date:** 3/5/2014 11:25:00 AM
Client Sample ID: EP-12A **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	5220	200	*	mg/L	1	3/10/2014 10:55:00 AM	12072

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Project: Q1-2014 Groundwater Sampling
Lab Order: 1403216

Lab ID: 1403216-006 **Collection Date:** 3/5/2014 11:50:00 AM
Client Sample ID: EP-11 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	23600	400	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-007 **Collection Date:** 3/5/2014 12:15:00 PM
Client Sample ID: EP-8 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	79300	2000	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-008 **Collection Date:** 3/5/2014 12:35:00 PM
Client Sample ID: EP-7 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	83700	1000	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-009 **Collection Date:** 3/5/2014 12:55:00 PM
Client Sample ID: EP-9 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	105000	2000	*	mg/L	1	3/10/2014 10:55:00 AM	12072

Lab ID: 1403216-010 **Collection Date:** 3/5/2014 1:35:00 PM
Client Sample ID: EP-6 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	15100	400	*	mg/L	1	3/10/2014 10:55:00 AM	12072

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
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403216**

11-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1-2014 Groundwater Sampling

Sample ID **MB-12072**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **12072**	RunNo: **17184**
Prep Date: **3/6/2014**	Analysis Date: **3/10/2014**	SeqNo: **494421** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-12072**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **12072**	RunNo: **17184**
Prep Date: **3/6/2014**	Analysis Date: **3/10/2014**	SeqNo: **494422** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1060	20.0	1000	0	106	80	120			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
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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: **1403216** RcptNo: 1

Received by/date: CM 03/05/14

Logged By: **Anne Thorne** 3/5/2014 3:40:00 PM Anne Thorne

Completed By: **Anne Thorne** 3/6/2014 Anne Thorne

Reviewed By: MS 03/06/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client:	Western Refining
Mailing Address:	Rt 3 Box 7 Gallup, NM 87301
Phone #:	505-722-3833
email or Fax#:	505-722-0210
QA/QC Package:	☒ Standard ☐ Level 4 (Full Validation)
Accreditation:	☐ NELAP ☐ Other
	☒ EDD (Type) Trihydro Format

☒ Standard ☐ Rush

Project Name: Q1-2014 Groundwater Sampling

Project #: Quarterly Sampling

Project Manager: Cheryl Johnson

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.3

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. 1403216	8260B + VOC	8015B (DRO/GRO)	WQCC Metals (Total and Dissolved)	8270 + Phenols	BOD and COD	Nitrates	Cyanide	TDS	Air Bubbles (Y or N)
3/5/14	0910	H_2O	EP-1	1		-001								X	
	0940	H_2O	STP-1 to EP-2	1		-002								X	
	10:20	H_2O	EP-2	1		-003								X	
	1100	H_2O	EP-12B	1		-004								X	
	11:25	H_2O	EP-12A	1		-005								X	
	11:50	H_2O	EP-11	1		-006								X	
	12:15	H_2O	EP-8	1		-007								X	
	12:35	H_2O	EP-7	1		-008								X	
	12:55	H_2O	EP-9	1		-009								X	
	1:35	H_2O	EP-6	1		-010								X	

Date	Time	Relinquished by:	Received by:	Date	Time
3/5/14	1346			3/5/14	1326
3/5/14	3:40			03/05/14	1540

Remarks:

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

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

March 24, 2014

Cheryl Johnson

Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q1 -2014 Groundwater Sampling OrderNo.: 1403198

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 13 sample(s) on 3/5/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Case Narrative

WO#: **1403198**
Date: **3/24/2014**

CLIENT: Western Refining Southwest, Gallup
Project: Q1 -2014 Groundwater Sampling

Analytical Remarks Regarding BOD:
Sample "EP-6" is being reported as an estimated value due to all 4 dilutions having a DO depletion below 1.0mg/L.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-1
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:10:00 AM
Lab ID: 1403198-001
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	18	1.0	*	mg/L	10	3/6/2014 9:54:13 PM
16887-00-6	Chloride	1500	50		mg/L	100	3/6/2014 10:06:38 PM
7727-37-9	Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2014 9:54:13 PM
24959-67-9	Bromide	1.3	1.0		mg/L	10	3/6/2014 9:54:13 PM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2014 9:54:13 PM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/6/2014 9:54:13 PM
14808-79-8	Sulfate	2100	50		mg/L	100	3/6/2014 10:06:38 PM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.13	0.0020		mg/L	1	3/6/2014 1:53:18 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 1:53:18 PM
7440-70-2	Calcium	350	5.0		mg/L	5	3/6/2014 1:55:31 PM
7440-47-3	Chromium	0.018	0.0060		mg/L	1	3/6/2014 1:53:18 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 1:53:18 PM
7439-89-6	Iron	0.78	0.020	*	mg/L	1	3/6/2014 1:53:18 PM
7439-95-4	Magnesium	130	5.0		mg/L	5	3/6/2014 1:55:31 PM
7439-96-5	Manganese	0.53	0.0020	*	mg/L	1	3/6/2014 1:53:18 PM
7440-09-7	Potassium	95	1.0		mg/L	1	3/6/2014 1:53:18 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/7/2014 2:42:06 PM
7440-23-5	Sodium	1300	50		mg/L	50	3/7/2014 2:44:01 PM
7440-66-6	Zinc	0.021	0.010		mg/L	1	3/6/2014 1:53:18 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.12	0.0020		mg/L	1	3/10/2014 5:30:00 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/10/2014 5:30:00 PM
7440-47-3	Chromium	0.018	0.0060		mg/L	1	3/10/2014 5:30:00 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/10/2014 5:30:00 PM
7439-89-6	Iron	0.86	0.020	*	mg/L	1	3/10/2014 5:30:00 PM
7439-96-5	Manganese	0.51	0.0020	*	mg/L	1	3/10/2014 5:30:00 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:20:46 PM
7440-66-6	Zinc	0.028	0.010		mg/L	1	3/10/2014 5:30:00 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	ND	0.010		mg/L	10	3/13/2014 2:49:16 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 2:49:16 PM
7782-49-2	Selenium	ND	0.010		mg/L	10	3/13/2014 2:49:16 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 2:49:16 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.013	0.010	*	mg/L	10	3/14/2014 3:33:55 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-1
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:10:00 AM
Lab ID: 1403198-001
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.0010		mg/L	1	3/12/2014 1:40:06 PM
7782-49-2	Selenium	ND	0.010		mg/L	10	3/14/2014 3:33:55 PM
7440-61-1	Uranium	ND	0.0010		mg/L	1	3/12/2014 1:40:06 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:25:54 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	55	2.0		mg/L	1	3/11/2014 11:16:00 AM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<10	10.00	H	CFU/100	10	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
208-96-8	Acenaphthylene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
62-53-3	Aniline	ND	50		µg/L	1	3/12/2014 1:29:59 PM
120-12-7	Anthracene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
103-33-3	Azobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
56-55-3	Benz(a)anthracene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
50-32-8	Benzo(a)pyrene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
205-99-2	Benzo(b)fluoranthene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
191-24-2	Benzo(g,h,i)perylene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
207-08-9	Benzo(k)fluoranthene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
65-85-0	Benzoic acid	ND	100		µg/L	1	3/12/2014 1:29:59 PM
100-51-6	Benzyl alcohol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	50		µg/L	1	3/12/2014 1:29:59 PM
111-44-4	Bis(2-chloroethyl)ether	ND	50		µg/L	1	3/12/2014 1:29:59 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	3/12/2014 1:29:59 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	50		µg/L	1	3/12/2014 1:29:59 PM
101-55-3	4-Bromophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 1:29:59 PM
85-68-7	Butyl benzyl phthalate	ND	50		µg/L	1	3/12/2014 1:29:59 PM
86-74-8	Carbazole	ND	50		µg/L	1	3/12/2014 1:29:59 PM
59-50-7	4-Chloro-3-methylphenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
106-47-8	4-Chloroaniline	ND	50		µg/L	1	3/12/2014 1:29:59 PM
91-58-7	2-Chloronaphthalene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
95-57-8	2-Chlorophenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 1:29:59 PM
218-01-9	Chrysene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
84-74-2	Di-n-butyl phthalate	ND	50		µg/L	1	3/12/2014 1:29:59 PM

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-1
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:10:00 AM
Lab ID: 1403198-001
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	50		µg/L	1	3/12/2014 1:29:59 PM
53-70-3	Dibenz(a,h)anthracene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
132-64-9	Dibenzofuran	ND	50		µg/L	1	3/12/2014 1:29:59 PM
95-50-1	1,2-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
541-73-1	1,3-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
106-46-7	1,4-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
91-94-1	3,3´-Dichlorobenzidine	ND	50		µg/L	1	3/12/2014 1:29:59 PM
84-66-2	Diethyl phthalate	ND	50		µg/L	1	3/12/2014 1:29:59 PM
131-11-3	Dimethyl phthalate	ND	50		µg/L	1	3/12/2014 1:29:59 PM
120-83-2	2,4-Dichlorophenol	ND	100		µg/L	1	3/12/2014 1:29:59 PM
105-67-9	2,4-Dimethylphenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	3/12/2014 1:29:59 PM
51-28-5	2,4-Dinitrophenol	ND	100		µg/L	1	3/12/2014 1:29:59 PM
121-14-2	2,4-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
606-20-2	2,6-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
206-44-0	Fluoranthene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
86-73-7	Fluorene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
118-74-1	Hexachlorobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
87-68-3	Hexachlorobutadiene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
77-47-4	Hexachlorocyclopentadiene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
67-72-1	Hexachloroethane	ND	50		µg/L	1	3/12/2014 1:29:59 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
78-59-1	Isophorone	ND	50		µg/L	1	3/12/2014 1:29:59 PM
90-12-0	1-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
91-57-6	2-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
95-48-7	2-Methylphenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
782-06-0	3+4-Methylphenol	140	50		µg/L	1	3/12/2014 1:29:59 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	50		µg/L	1	3/12/2014 1:29:59 PM
62-75-9	N-Nitrosodimethylamine	ND	50		µg/L	1	3/12/2014 1:29:59 PM
86-30-6	N-Nitrosodiphenylamine	ND	50		µg/L	1	3/12/2014 1:29:59 PM
91-20-3	Naphthalene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
88-74-4	2-Nitroaniline	ND	50		µg/L	1	3/12/2014 1:29:59 PM
99-09-2	3-Nitroaniline	ND	50		µg/L	1	3/12/2014 1:29:59 PM
100-01-6	4-Nitroaniline	ND	50		µg/L	1	3/12/2014 1:29:59 PM
98-95-3	Nitrobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
88-75-5	2-Nitrophenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
100-02-7	4-Nitrophenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
87-86-5	Pentachlorophenol	ND	100		µg/L	1	3/12/2014 1:29:59 PM
85-01-8	Phenanthrene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
108-95-2	Phenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-1
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:10:00 AM
Lab ID: 1403198-001
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
110-86-1	Pyridine	ND	50		µg/L	1	3/12/2014 1:29:59 PM
120-82-1	1,2,4-Trichlorobenzene	ND	50		µg/L	1	3/12/2014 1:29:59 PM
95-95-4	2,4,5-Trichlorophenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
88-06-2	2,4,6-Trichlorophenol	ND	50		µg/L	1	3/12/2014 1:29:59 PM
367-12-4	Surr: 2-Fluorophenol	48.8	22.7-98		%REC	1	3/12/2014 1:29:59 PM
4165-62-2	Surr: Phenol-d5	37.0	23.4-74.9		%REC	1	3/12/2014 1:29:59 PM
118-79-6	Surr: 2,4,6-Tribromophenol	80.4	23.3-111		%REC	1	3/12/2014 1:29:59 PM
4165-60-0	Surr: Nitrobenzene-d5	69.5	36.8-111		%REC	1	3/12/2014 1:29:59 PM
321-60-8	Surr: 2-Fluorobiphenyl	64.9	38.3-110		%REC	1	3/12/2014 1:29:59 PM
1718-51-0	Surr: 4-Terphenyl-d14	70.0	52.1-116		%REC	1	3/12/2014 1:29:59 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
108-88-3	Toluene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/10/2014 9:29:16 PM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/10/2014 9:29:16 PM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/10/2014 9:29:16 PM
91-20-3	Naphthalene	ND	20		µg/L	10	3/10/2014 9:29:16 PM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 9:29:16 PM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 9:29:16 PM
67-64-1	Acetone	ND	100		µg/L	10	3/10/2014 9:29:16 PM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-25-2	Bromoform	ND	10		µg/L	10	3/10/2014 9:29:16 PM
74-83-9	Bromomethane	ND	30		µg/L	10	3/10/2014 9:29:16 PM
78-93-3	2-Butanone	ND	100		µg/L	10	3/10/2014 9:29:16 PM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/10/2014 9:29:16 PM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/10/2014 9:29:16 PM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-00-3	Chloroethane	ND	20		µg/L	10	3/10/2014 9:29:16 PM
67-66-3	Chloroform	ND	10		µg/L	10	3/10/2014 9:29:16 PM
74-87-3	Chloromethane	ND	30		µg/L	10	3/10/2014 9:29:16 PM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/10/2014 9:29:16 PM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 9:29:16 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-1
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:10:00 AM
Lab ID: 1403198-001
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/10/2014 9:29:16 PM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/10/2014 9:29:16 PM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/10/2014 9:29:16 PM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/10/2014 9:29:16 PM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/10/2014 9:29:16 PM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/10/2014 9:29:16 PM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
100-42-5	Styrene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/10/2014 9:29:16 PM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/10/2014 9:29:16 PM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/10/2014 9:29:16 PM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 9:29:16 PM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/10/2014 9:29:16 PM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/10/2014 9:29:16 PM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/10/2014 9:29:16 PM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/10/2014 9:29:16 PM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/10/2014 9:29:16 PM
17060-07-0	Surr: 1,2-Dichloroethane-d4	91.3	70-130		%REC	10	3/10/2014 9:29:16 PM
460-00-4	Surr: 4-Bromofluorobenzene	93.0	70-130		%REC	10	3/10/2014 9:29:16 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-1
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:10:00 AM
Lab ID: 1403198-001
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	96.3	70-130		%REC	10	3/10/2014 9:29:16 PM
2037-26-5	Surr: Toluene-d8	91.1	70-130		%REC	10	3/10/2014 9:29:16 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	6800	0.010		µmhos/c	1	3/6/2014 12:29:09 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.61	1.68	H	pH units	1	3/6/2014 12:29:09 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 10:20:00 AM
Lab ID: 1403198-002
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	37	10	*	mg/L	100	3/6/2014 10:31:28 PM
16887-00-6	Chloride	1900	50		mg/L	100	3/6/2014 10:31:28 PM
7727-37-9	Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2014 10:19:03 PM
24959-67-9	Bromide	3.4	1.0		mg/L	10	3/6/2014 10:19:03 PM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2014 10:19:03 PM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/6/2014 10:19:03 PM
14808-79-8	Sulfate	680	50		mg/L	100	3/6/2014 10:31:28 PM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.13	0.0020		mg/L	1	3/6/2014 1:59:17 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 1:59:17 PM
7440-70-2	Calcium	140	5.0		mg/L	5	3/6/2014 2:01:09 PM
7440-47-3	Chromium	0.016	0.0060		mg/L	1	3/6/2014 1:59:17 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 1:59:17 PM
7439-89-6	Iron	0.72	0.020	*	mg/L	1	3/6/2014 1:59:17 PM
7439-95-4	Magnesium	36	1.0		mg/L	1	3/6/2014 1:59:17 PM
7439-96-5	Manganese	0.38	0.0020	*	mg/L	1	3/6/2014 1:59:17 PM
7440-09-7	Potassium	150	5.0		mg/L	5	3/6/2014 2:01:09 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/7/2014 2:45:54 PM
7440-23-5	Sodium	1500	50		mg/L	50	3/7/2014 2:47:54 PM
7440-66-6	Zinc	0.010	0.010		mg/L	1	3/6/2014 1:59:17 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.12	0.0020		mg/L	1	3/10/2014 5:31:57 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/10/2014 5:31:57 PM
7440-47-3	Chromium	0.013	0.0060		mg/L	1	3/10/2014 5:31:57 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/10/2014 5:31:57 PM
7439-89-6	Iron	1.2	0.10	*	mg/L	5	3/12/2014 1:04:04 PM
7439-96-5	Manganese	0.36	0.0020	*	mg/L	1	3/10/2014 5:31:57 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:21:49 PM
7440-66-6	Zinc	0.020	0.010		mg/L	1	3/10/2014 5:31:57 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	ND	0.010		mg/L	10	3/13/2014 2:57:36 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 2:57:36 PM
7782-49-2	Selenium	0.042	0.010		mg/L	10	3/13/2014 2:57:36 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 2:57:36 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.012	0.010	*	mg/L	10	3/14/2014 3:37:21 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 10:20:00 AM
Lab ID: 1403198-002 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.0010		mg/L	1	3/12/2014 1:47:25 PM
7782-49-2	Selenium	0.023	0.010		mg/L	10	3/14/2014 3:37:21 PM
7440-61-1	Uranium	0.0051	0.0010		mg/L	1	3/12/2014 1:47:25 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.0010		mg/L	5	3/6/2014 5:54:59 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	450	2.0		mg/L	1	3/11/2014 11:16:00 AM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	>2419.6	1.000	H	CFU/100	1	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
208-96-8	Acenaphthylene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
62-53-3	Aniline	44	10		µg/L	1	3/12/2014 1:58:56 PM
120-12-7	Anthracene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
103-33-3	Azobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
56-55-3	Benz(a)anthracene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
50-32-8	Benzo(a)pyrene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
205-99-2	Benzo(b)fluoranthene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
191-24-2	Benzo(g,h,i)perylene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
207-08-9	Benzo(k)fluoranthene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
65-85-0	Benzoic acid	97	20		µg/L	1	3/12/2014 1:58:56 PM
100-51-6	Benzyl alcohol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/12/2014 1:58:56 PM
111-44-4	Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/12/2014 1:58:56 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/12/2014 1:58:56 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/12/2014 1:58:56 PM
101-55-3	4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 1:58:56 PM
85-68-7	Butyl benzyl phthalate	ND	10		µg/L	1	3/12/2014 1:58:56 PM
86-74-8	Carbazole	ND	10		µg/L	1	3/12/2014 1:58:56 PM
59-50-7	4-Chloro-3-methylphenol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
106-47-8	4-Chloroaniline	ND	10		µg/L	1	3/12/2014 1:58:56 PM
91-58-7	2-Chloronaphthalene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
95-57-8	2-Chlorophenol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 1:58:56 PM
218-01-9	Chrysene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
84-74-2	Di-n-butyl phthalate	ND	10		µg/L	1	3/12/2014 1:58:56 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 10:20:00 AM
Lab ID: 1403198-002
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	10		µg/L	1	3/12/2014 1:58:56 PM
53-70-3	Dibenz(a,h)anthracene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
132-64-9	Dibenzofuran	ND	10		µg/L	1	3/12/2014 1:58:56 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
91-94-1	3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/12/2014 1:58:56 PM
84-66-2	Diethyl phthalate	ND	10		µg/L	1	3/12/2014 1:58:56 PM
131-11-3	Dimethyl phthalate	ND	10		µg/L	1	3/12/2014 1:58:56 PM
120-83-2	2,4-Dichlorophenol	ND	20		µg/L	1	3/12/2014 1:58:56 PM
105-67-9	2,4-Dimethylphenol	29	10		µg/L	1	3/12/2014 1:58:56 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/12/2014 1:58:56 PM
51-28-5	2,4-Dinitrophenol	ND	20		µg/L	1	3/12/2014 1:58:56 PM
121-14-2	2,4-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
606-20-2	2,6-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
206-44-0	Fluoranthene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
86-73-7	Fluorene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
118-74-1	Hexachlorobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
77-47-4	Hexachlorocyclopentadiene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
67-72-1	Hexachloroethane	ND	10		µg/L	1	3/12/2014 1:58:56 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
78-59-1	Isophorone	ND	10		µg/L	1	3/12/2014 1:58:56 PM
90-12-0	1-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
91-57-6	2-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
95-48-7	2-Methylphenol	140	10		µg/L	1	3/12/2014 1:58:56 PM
782-06-0	3+4-Methylphenol	350	100		µg/L	10	3/13/2014 1:20:22 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/12/2014 1:58:56 PM
62-75-9	N-Nitrosodimethylamine	ND	10		µg/L	1	3/12/2014 1:58:56 PM
86-30-6	N-Nitrosodiphenylamine	ND	10		µg/L	1	3/12/2014 1:58:56 PM
91-20-3	Naphthalene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
88-74-4	2-Nitroaniline	ND	10		µg/L	1	3/12/2014 1:58:56 PM
99-09-2	3-Nitroaniline	ND	10		µg/L	1	3/12/2014 1:58:56 PM
100-01-6	4-Nitroaniline	ND	10		µg/L	1	3/12/2014 1:58:56 PM
98-95-3	Nitrobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
88-75-5	2-Nitrophenol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
100-02-7	4-Nitrophenol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
87-86-5	Pentachlorophenol	ND	20		µg/L	1	3/12/2014 1:58:56 PM
85-01-8	Phenanthrene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
108-95-2	Phenol	870	100		µg/L	10	3/13/2014 1:20:22 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 10:20:00 AM
Lab ID: 1403198-002
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
110-86-1	Pyridine	ND	10		µg/L	1	3/12/2014 1:58:56 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/12/2014 1:58:56 PM
95-95-4	2,4,5-Trichlorophenol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
88-06-2	2,4,6-Trichlorophenol	ND	10		µg/L	1	3/12/2014 1:58:56 PM
367-12-4	Surr: 2-Fluorophenol	66.5	22.7-98		%REC	1	3/12/2014 1:58:56 PM
4165-62-2	Surr: Phenol-d5	52.6	23.4-74.9		%REC	1	3/12/2014 1:58:56 PM
118-79-6	Surr: 2,4,6-Tribromophenol	102	23.3-111		%REC	1	3/12/2014 1:58:56 PM
4165-60-0	Surr: Nitrobenzene-d5	89.1	36.8-111		%REC	1	3/12/2014 1:58:56 PM
321-60-8	Surr: 2-Fluorobiphenyl	74.9	38.3-110		%REC	1	3/12/2014 1:58:56 PM
1718-51-0	Surr: 4-Terphenyl-d14	81.9	52.1-116		%REC	1	3/12/2014 1:58:56 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
108-88-3	Toluene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/10/2014 9:57:01 PM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/10/2014 9:57:01 PM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/10/2014 9:57:01 PM
91-20-3	Naphthalene	ND	20		µg/L	10	3/10/2014 9:57:01 PM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 9:57:01 PM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 9:57:01 PM
67-64-1	Acetone	670	100		µg/L	10	3/10/2014 9:57:01 PM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-25-2	Bromoform	ND	10		µg/L	10	3/10/2014 9:57:01 PM
74-83-9	Bromomethane	ND	30		µg/L	10	3/10/2014 9:57:01 PM
78-93-3	2-Butanone	ND	100		µg/L	10	3/10/2014 9:57:01 PM
75-15-0	Carbon disulfide	110	100		µg/L	10	3/10/2014 9:57:01 PM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/10/2014 9:57:01 PM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-00-3	Chloroethane	ND	20		µg/L	10	3/10/2014 9:57:01 PM
67-66-3	Chloroform	ND	10		µg/L	10	3/10/2014 9:57:01 PM
74-87-3	Chloromethane	ND	30		µg/L	10	3/10/2014 9:57:01 PM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/10/2014 9:57:01 PM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 9:57:01 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 10:20:00 AM
Lab ID: 1403198-002
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/10/2014 9:57:01 PM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/10/2014 9:57:01 PM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/10/2014 9:57:01 PM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/10/2014 9:57:01 PM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/10/2014 9:57:01 PM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/10/2014 9:57:01 PM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
100-42-5	Styrene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/10/2014 9:57:01 PM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/10/2014 9:57:01 PM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/10/2014 9:57:01 PM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 9:57:01 PM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/10/2014 9:57:01 PM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/10/2014 9:57:01 PM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/10/2014 9:57:01 PM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/10/2014 9:57:01 PM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/10/2014 9:57:01 PM
17060-07-0	Surr: 1,2-Dichloroethane-d4	91.9	70-130		%REC	10	3/10/2014 9:57:01 PM
460-00-4	Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	10	3/10/2014 9:57:01 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 10:20:00 AM
Lab ID: 1403198-002
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	97.8	70-130		%REC	10	3/10/2014 9:57:01 PM
2037-26-5	Surr: Toluene-d8	91.0	70-130		%REC	10	3/10/2014 9:57:01 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	7600	0.010		µmhos/c	1	3/6/2014 12:33:30 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.87	1.68	H	pH units	1	3/6/2014 12:33:30 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 1:25:00 PM
Lab ID: 1403198-003
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	18	1.0	*	mg/L	10	3/6/2014 11:08:44 PM
16887-00-6	Chloride	6900	500		mg/L	1000	3/12/2014 1:43:00 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/6/2014 11:08:44 PM
24959-67-9	Bromide	2.3	1.0		mg/L	10	3/6/2014 11:08:44 PM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2014 11:08:44 PM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/6/2014 11:08:44 PM
14808-79-8	Sulfate	1500	50		mg/L	100	3/6/2014 11:21:09 PM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.11	0.0020		mg/L	1	3/6/2014 2:13:28 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 2:13:28 PM
7440-70-2	Calcium	450	5.0		mg/L	5	3/6/2014 2:15:45 PM
7440-47-3	Chromium	0.0091	0.0060		mg/L	1	3/6/2014 2:13:28 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 2:13:28 PM
7439-89-6	Iron	0.45	0.020	*	mg/L	1	3/6/2014 2:13:28 PM
7439-95-4	Magnesium	150	5.0		mg/L	5	3/6/2014 2:15:45 PM
7439-96-5	Manganese	0.60	0.0020	*	mg/L	1	3/6/2014 2:13:28 PM
7440-09-7	Potassium	240	5.0		mg/L	5	3/6/2014 2:15:45 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/7/2014 2:49:38 PM
7440-23-5	Sodium	4800	100		mg/L	100	3/7/2014 2:51:26 PM
7440-66-6	Zinc	0.011	0.010		mg/L	1	3/6/2014 2:13:28 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.12	0.0020		mg/L	1	3/12/2014 1:06:01 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/12/2014 1:06:01 PM
7440-47-3	Chromium	0.0089	0.0060		mg/L	1	3/12/2014 1:06:01 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/12/2014 1:06:01 PM
7439-89-6	Iron	0.67	0.020	*	mg/L	1	3/10/2014 5:33:56 PM
7439-96-5	Manganese	0.59	0.0020	*	mg/L	1	3/12/2014 1:06:01 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:22:51 PM
7440-66-6	Zinc	0.014	0.010		mg/L	1	3/12/2014 3:32:31 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.015	0.010	*	mg/L	10	3/13/2014 3:00:22 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 3:00:22 PM
7782-49-2	Selenium	0.024	0.010		mg/L	10	3/13/2014 3:00:22 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 3:00:22 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.015	0.010	*	mg/L	10	3/14/2014 3:40:48 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 1:25:00 PM
Lab ID: 1403198-003 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.010		mg/L	10	3/14/2014 3:40:48 PM
7782-49-2	Selenium	0.018	0.010		mg/L	10	3/14/2014 3:40:48 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/14/2014 3:40:48 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:33:09 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	>171.97	2.0	E	mg/L	1	3/12/2014 3:12:00 PM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<10	10.00		CFU/100	10	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
208-96-8	Acenaphthylene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
62-53-3	Aniline	ND	50		µg/L	1	3/12/2014 2:27:56 PM
120-12-7	Anthracene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
103-33-3	Azobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
56-55-3	Benz(a)anthracene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
50-32-8	Benzo(a)pyrene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
205-99-2	Benzo(b)fluoranthene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
191-24-2	Benzo(g,h,i)perylene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
207-08-9	Benzo(k)fluoranthene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
65-85-0	Benzoic acid	ND	100		µg/L	1	3/12/2014 2:27:56 PM
100-51-6	Benzyl alcohol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	50		µg/L	1	3/12/2014 2:27:56 PM
111-44-4	Bis(2-chloroethyl)ether	ND	50		µg/L	1	3/12/2014 2:27:56 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	3/12/2014 2:27:56 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	50		µg/L	1	3/12/2014 2:27:56 PM
101-55-3	4-Bromophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 2:27:56 PM
85-68-7	Butyl benzyl phthalate	ND	50		µg/L	1	3/12/2014 2:27:56 PM
86-74-8	Carbazole	ND	50		µg/L	1	3/12/2014 2:27:56 PM
59-50-7	4-Chloro-3-methylphenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
106-47-8	4-Chloroaniline	ND	50		µg/L	1	3/12/2014 2:27:56 PM
91-58-7	2-Chloronaphthalene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
95-57-8	2-Chlorophenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 2:27:56 PM
218-01-9	Chrysene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
84-74-2	Di-n-butyl phthalate	ND	50		µg/L	1	3/12/2014 2:27:56 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 1:25:00 PM
Lab ID: 1403198-003
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	50		µg/L	1	3/12/2014 2:27:56 PM
53-70-3	Dibenz(a,h)anthracene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
132-64-9	Dibenzofuran	ND	50		µg/L	1	3/12/2014 2:27:56 PM
95-50-1	1,2-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
541-73-1	1,3-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
106-46-7	1,4-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
91-94-1	3,3´-Dichlorobenzidine	ND	50		µg/L	1	3/12/2014 2:27:56 PM
84-66-2	Diethyl phthalate	ND	50		µg/L	1	3/12/2014 2:27:56 PM
131-11-3	Dimethyl phthalate	ND	50		µg/L	1	3/12/2014 2:27:56 PM
120-83-2	2,4-Dichlorophenol	ND	100		µg/L	1	3/12/2014 2:27:56 PM
105-67-9	2,4-Dimethylphenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	3/12/2014 2:27:56 PM
51-28-5	2,4-Dinitrophenol	ND	100		µg/L	1	3/12/2014 2:27:56 PM
121-14-2	2,4-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
606-20-2	2,6-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
206-44-0	Fluoranthene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
86-73-7	Fluorene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
118-74-1	Hexachlorobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
87-68-3	Hexachlorobutadiene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
77-47-4	Hexachlorocyclopentadiene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
67-72-1	Hexachloroethane	ND	50		µg/L	1	3/12/2014 2:27:56 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
78-59-1	Isophorone	ND	50		µg/L	1	3/12/2014 2:27:56 PM
90-12-0	1-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
91-57-6	2-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
95-48-7	2-Methylphenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
782-06-0	3+4-Methylphenol	88	50		µg/L	1	3/12/2014 2:27:56 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	50		µg/L	1	3/12/2014 2:27:56 PM
62-75-9	N-Nitrosodimethylamine	ND	50		µg/L	1	3/12/2014 2:27:56 PM
86-30-6	N-Nitrosodiphenylamine	ND	50		µg/L	1	3/12/2014 2:27:56 PM
91-20-3	Naphthalene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
88-74-4	2-Nitroaniline	ND	50		µg/L	1	3/12/2014 2:27:56 PM
99-09-2	3-Nitroaniline	ND	50		µg/L	1	3/12/2014 2:27:56 PM
100-01-6	4-Nitroaniline	ND	50		µg/L	1	3/12/2014 2:27:56 PM
98-95-3	Nitrobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
88-75-5	2-Nitrophenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
100-02-7	4-Nitrophenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
87-86-5	Pentachlorophenol	ND	100		µg/L	1	3/12/2014 2:27:56 PM
85-01-8	Phenanthrene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
108-95-2	Phenol	280	50		µg/L	1	3/12/2014 2:27:56 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 1:25:00 PM
Lab ID: 1403198-003
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
110-86-1	Pyridine	ND	50		µg/L	1	3/12/2014 2:27:56 PM
120-82-1	1,2,4-Trichlorobenzene	ND	50		µg/L	1	3/12/2014 2:27:56 PM
95-95-4	2,4,5-Trichlorophenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
88-06-2	2,4,6-Trichlorophenol	ND	50		µg/L	1	3/12/2014 2:27:56 PM
367-12-4	Surr: 2-Fluorophenol	41.6	22.7-98		%REC	1	3/12/2014 2:27:56 PM
4165-62-2	Surr: Phenol-d5	35.1	23.4-74.9		%REC	1	3/12/2014 2:27:56 PM
118-79-6	Surr: 2,4,6-Tribromophenol	85.4	23.3-111		%REC	1	3/12/2014 2:27:56 PM
4165-60-0	Surr: Nitrobenzene-d5	63.9	36.8-111		%REC	1	3/12/2014 2:27:56 PM
321-60-8	Surr: 2-Fluorobiphenyl	67.2	38.3-110		%REC	1	3/12/2014 2:27:56 PM
1718-51-0	Surr: 4-Terphenyl-d14	75.0	52.1-116		%REC	1	3/12/2014 2:27:56 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
108-88-3	Toluene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/10/2014 10:24:47 PM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/10/2014 10:24:47 PM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/10/2014 10:24:47 PM
91-20-3	Naphthalene	ND	20		µg/L	10	3/10/2014 10:24:47 PM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 10:24:47 PM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 10:24:47 PM
67-64-1	Acetone	140	100		µg/L	10	3/10/2014 10:24:47 PM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-25-2	Bromoform	ND	10		µg/L	10	3/10/2014 10:24:47 PM
74-83-9	Bromomethane	ND	30		µg/L	10	3/10/2014 10:24:47 PM
78-93-3	2-Butanone	ND	100		µg/L	10	3/10/2014 10:24:47 PM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/10/2014 10:24:47 PM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/10/2014 10:24:47 PM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-00-3	Chloroethane	ND	20		µg/L	10	3/10/2014 10:24:47 PM
67-66-3	Chloroform	ND	10		µg/L	10	3/10/2014 10:24:47 PM
74-87-3	Chloromethane	ND	30		µg/L	10	3/10/2014 10:24:47 PM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/10/2014 10:24:47 PM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 10:24:47 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 1:25:00 PM
Lab ID: 1403198-003
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/10/2014 10:24:47 PM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/10/2014 10:24:47 PM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/10/2014 10:24:47 PM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/10/2014 10:24:47 PM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/10/2014 10:24:47 PM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/10/2014 10:24:47 PM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
100-42-5	Styrene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/10/2014 10:24:47 PM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/10/2014 10:24:47 PM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/10/2014 10:24:47 PM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 10:24:47 PM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/10/2014 10:24:47 PM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/10/2014 10:24:47 PM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/10/2014 10:24:47 PM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/10/2014 10:24:47 PM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/10/2014 10:24:47 PM
17060-07-0	Surr: 1,2-Dichloroethane-d4	93.1	70-130		%REC	10	3/10/2014 10:24:47 PM
460-00-4	Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	10	3/10/2014 10:24:47 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-6
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 1:25:00 PM
Lab ID: 1403198-003
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	96.0	70-130		%REC	10	3/10/2014 10:24:47 PM
2037-26-5	Surr: Toluene-d8	91.6	70-130		%REC	10	3/10/2014 10:24:47 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	23000	0.050		µmhos/c	5	3/6/2014 2:08:07 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.69	1.68	H	pH units	1	3/6/2014 12:41:53 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:35:00 PM
Lab ID: 1403198-004
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	28	10	*	mg/L	100	3/6/2014 11:45:58 PM
16887-00-6	Chloride	41000	2500		mg/L	5000	3/12/2014 1:55:25 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	10		mg/L	100	3/6/2014 11:45:58 PM
24959-67-9	Bromide	19	1.0		mg/L	10	3/6/2014 11:33:33 PM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2014 11:33:33 PM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/6/2014 11:33:33 PM
14808-79-8	Sulfate	8500	2500		mg/L	5000	3/12/2014 1:55:25 AM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.11	0.010		mg/L	5	3/6/2014 2:21:29 PM
7440-43-9	Cadmium	ND	0.010		mg/L	5	3/6/2014 2:21:29 PM
7440-70-2	Calcium	760	50		mg/L	50	3/6/2014 2:23:41 PM
7440-47-3	Chromium	ND	0.030		mg/L	5	3/6/2014 2:21:29 PM
7440-50-8	Copper	ND	0.030		mg/L	5	3/6/2014 2:21:29 PM
7439-89-6	Iron	0.15	0.10		mg/L	5	3/6/2014 2:21:29 PM
7439-95-4	Magnesium	1000	50		mg/L	50	3/6/2014 2:23:41 PM
7439-96-5	Manganese	2.1	0.010	*	mg/L	5	3/6/2014 2:21:29 PM
7440-09-7	Potassium	1700	50		mg/L	50	3/6/2014 2:23:41 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/7/2014 2:53:16 PM
7440-23-5	Sodium	28000	500		mg/L	500	3/7/2014 2:55:01 PM
7440-66-6	Zinc	ND	0.050		mg/L	5	3/6/2014 2:21:29 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.11	0.010		mg/L	5	3/12/2014 1:27:44 PM
7440-43-9	Cadmium	ND	0.010		mg/L	5	3/12/2014 1:27:44 PM
7440-47-3	Chromium	ND	0.030		mg/L	5	3/12/2014 1:27:44 PM
7440-50-8	Copper	ND	0.030		mg/L	5	3/12/2014 1:27:44 PM
7439-89-6	Iron	0.28	0.10		mg/L	5	3/12/2014 1:27:44 PM
7439-96-5	Manganese	2.0	0.010	*	mg/L	5	3/12/2014 1:27:44 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/18/2014 3:23:53 PM
7440-66-6	Zinc	ND	0.050		mg/L	5	3/12/2014 3:34:01 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.11	0.10	*	mg/L	100	3/13/2014 3:03:07 PM
7439-92-1	Lead	ND	0.10		mg/L	100	3/13/2014 3:03:07 PM
7782-49-2	Selenium	0.13	0.10	*	mg/L	100	3/13/2014 3:03:07 PM
7440-61-1	Uranium	ND	0.10		mg/L	100	3/13/2014 3:03:07 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.15	0.10	*	mg/L	100	3/14/2014 3:44:15 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:35:00 PM
Lab ID: 1403198-004
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.10		mg/L	100	3/14/2014 3:44:15 PM
7782-49-2	Selenium	0.12	0.10	*	mg/L	100	3/14/2014 3:44:15 PM
7440-61-1	Uranium	ND	0.10		mg/L	100	3/14/2014 3:44:15 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:34:59 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	11	2.0		mg/L	1	3/11/2014 2:36:00 PM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<1	1.000		CFU/100	1	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
208-96-8	Acenaphthylene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
62-53-3	Aniline	ND	10		µg/L	1	3/12/2014 2:56:54 PM
120-12-7	Anthracene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
103-33-3	Azobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
56-55-3	Benz(a)anthracene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
50-32-8	Benzo(a)pyrene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
205-99-2	Benzo(b)fluoranthene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
191-24-2	Benzo(g,h,i)perylene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
207-08-9	Benzo(k)fluoranthene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
65-85-0	Benzoic acid	ND	20		µg/L	1	3/12/2014 2:56:54 PM
100-51-6	Benzyl alcohol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/12/2014 2:56:54 PM
111-44-4	Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/12/2014 2:56:54 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/12/2014 2:56:54 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/12/2014 2:56:54 PM
101-55-3	4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 2:56:54 PM
85-68-7	Butyl benzyl phthalate	ND	10		µg/L	1	3/12/2014 2:56:54 PM
86-74-8	Carbazole	ND	10		µg/L	1	3/12/2014 2:56:54 PM
59-50-7	4-Chloro-3-methylphenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
106-47-8	4-Chloroaniline	ND	10		µg/L	1	3/12/2014 2:56:54 PM
91-58-7	2-Chloronaphthalene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
95-57-8	2-Chlorophenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 2:56:54 PM
218-01-9	Chrysene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
84-74-2	Di-n-butyl phthalate	ND	10		µg/L	1	3/12/2014 2:56:54 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:35:00 PM
Lab ID: 1403198-004
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	10		µg/L	1	3/12/2014 2:56:54 PM
53-70-3	Dibenz(a,h)anthracene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
132-64-9	Dibenzofuran	ND	10		µg/L	1	3/12/2014 2:56:54 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
91-94-1	3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/12/2014 2:56:54 PM
84-66-2	Diethyl phthalate	ND	10		µg/L	1	3/12/2014 2:56:54 PM
131-11-3	Dimethyl phthalate	ND	10		µg/L	1	3/12/2014 2:56:54 PM
120-83-2	2,4-Dichlorophenol	ND	20		µg/L	1	3/12/2014 2:56:54 PM
105-67-9	2,4-Dimethylphenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/12/2014 2:56:54 PM
51-28-5	2,4-Dinitrophenol	ND	20		µg/L	1	3/12/2014 2:56:54 PM
121-14-2	2,4-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
606-20-2	2,6-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
206-44-0	Fluoranthene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
86-73-7	Fluorene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
118-74-1	Hexachlorobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
77-47-4	Hexachlorocyclopentadiene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
67-72-1	Hexachloroethane	ND	10		µg/L	1	3/12/2014 2:56:54 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
78-59-1	Isophorone	ND	10		µg/L	1	3/12/2014 2:56:54 PM
90-12-0	1-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
91-57-6	2-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
95-48-7	2-Methylphenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
782-06-0	3+4-Methylphenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/12/2014 2:56:54 PM
62-75-9	N-Nitrosodimethylamine	ND	10		µg/L	1	3/12/2014 2:56:54 PM
86-30-6	N-Nitrosodiphenylamine	ND	10		µg/L	1	3/12/2014 2:56:54 PM
91-20-3	Naphthalene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
88-74-4	2-Nitroaniline	ND	10		µg/L	1	3/12/2014 2:56:54 PM
99-09-2	3-Nitroaniline	ND	10		µg/L	1	3/12/2014 2:56:54 PM
100-01-6	4-Nitroaniline	ND	10		µg/L	1	3/12/2014 2:56:54 PM
98-95-3	Nitrobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
88-75-5	2-Nitrophenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
100-02-7	4-Nitrophenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
87-86-5	Pentachlorophenol	ND	20		µg/L	1	3/12/2014 2:56:54 PM
85-01-8	Phenanthrene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
108-95-2	Phenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:35:00 PM
Lab ID: 1403198-004
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
110-86-1	Pyridine	ND	10		µg/L	1	3/12/2014 2:56:54 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/12/2014 2:56:54 PM
95-95-4	2,4,5-Trichlorophenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
88-06-2	2,4,6-Trichlorophenol	ND	10		µg/L	1	3/12/2014 2:56:54 PM
367-12-4	Surr: 2-Fluorophenol	60.7	22.7-98		%REC	1	3/12/2014 2:56:54 PM
4165-62-2	Surr: Phenol-d5	55.7	23.4-74.9		%REC	1	3/12/2014 2:56:54 PM
118-79-6	Surr: 2,4,6-Tribromophenol	72.5	23.3-111		%REC	1	3/12/2014 2:56:54 PM
4165-60-0	Surr: Nitrobenzene-d5	85.9	36.8-111		%REC	1	3/12/2014 2:56:54 PM
321-60-8	Surr: 2-Fluorobiphenyl	72.5	38.3-110		%REC	1	3/12/2014 2:56:54 PM
1718-51-0	Surr: 4-Terphenyl-d14	60.9	52.1-116		%REC	1	3/12/2014 2:56:54 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
108-88-3	Toluene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/10/2014 10:52:36 PM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/10/2014 10:52:36 PM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/10/2014 10:52:36 PM
91-20-3	Naphthalene	ND	20		µg/L	10	3/10/2014 10:52:36 PM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 10:52:36 PM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 10:52:36 PM
67-64-1	Acetone	ND	100		µg/L	10	3/10/2014 10:52:36 PM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-25-2	Bromoform	ND	10		µg/L	10	3/10/2014 10:52:36 PM
74-83-9	Bromomethane	ND	30		µg/L	10	3/10/2014 10:52:36 PM
78-93-3	2-Butanone	ND	100		µg/L	10	3/10/2014 10:52:36 PM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/10/2014 10:52:36 PM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/10/2014 10:52:36 PM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-00-3	Chloroethane	ND	20		µg/L	10	3/10/2014 10:52:36 PM
67-66-3	Chloroform	ND	10		µg/L	10	3/10/2014 10:52:36 PM
74-87-3	Chloromethane	ND	30		µg/L	10	3/10/2014 10:52:36 PM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/10/2014 10:52:36 PM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 10:52:36 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:35:00 PM
Lab ID: 1403198-004
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/10/2014 10:52:36 PM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/10/2014 10:52:36 PM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/10/2014 10:52:36 PM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/10/2014 10:52:36 PM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/10/2014 10:52:36 PM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/10/2014 10:52:36 PM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
100-42-5	Styrene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/10/2014 10:52:36 PM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/10/2014 10:52:36 PM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/10/2014 10:52:36 PM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 10:52:36 PM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/10/2014 10:52:36 PM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/10/2014 10:52:36 PM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/10/2014 10:52:36 PM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/10/2014 10:52:36 PM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/10/2014 10:52:36 PM
17060-07-0	Surr: 1,2-Dichloroethane-d4	87.5	70-130		%REC	10	3/10/2014 10:52:36 PM
460-00-4	Surr: 4-Bromofluorobenzene	91.6	70-130		%REC	10	3/10/2014 10:52:36 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-7
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:35:00 PM
Lab ID: 1403198-004
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	94.8	70-130		%REC	10	3/10/2014 10:52:36 PM
2037-26-5	Surr: Toluene-d8	92.5	70-130		%REC	10	3/10/2014 10:52:36 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	130000	0.25		µmhos/c	25	3/6/2014 6:38:36 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.82	1.68	H	pH units	1	3/6/2014 12:46:01 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:15:00 PM
Lab ID: 1403198-005 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	27	10	*	mg/L	100	3/7/2014 12:10:47 AM
16887-00-6	Chloride	39000	2500		mg/L	5000	3/12/2014 2:07:50 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	10		mg/L	100	3/7/2014 12:10:47 AM
24959-67-9	Bromide	20	1.0		mg/L	10	3/6/2014 11:58:22 PM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/6/2014 11:58:22 PM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/6/2014 11:58:22 PM
14808-79-8	Sulfate	7900	2500		mg/L	5000	3/12/2014 2:07:50 AM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.11	0.010		mg/L	5	3/6/2014 2:27:33 PM
7440-43-9	Cadmium	ND	0.010		mg/L	5	3/6/2014 2:27:33 PM
7440-70-2	Calcium	780	50		mg/L	50	3/6/2014 2:29:30 PM
7440-47-3	Chromium	ND	0.030		mg/L	5	3/6/2014 2:27:33 PM
7440-50-8	Copper	ND	0.030		mg/L	5	3/6/2014 2:27:33 PM
7439-89-6	Iron	0.14	0.10		mg/L	5	3/6/2014 2:27:33 PM
7439-95-4	Magnesium	1000	50		mg/L	50	3/6/2014 2:29:30 PM
7439-96-5	Manganese	2.1	0.010	*	mg/L	5	3/6/2014 2:27:33 PM
7440-09-7	Potassium	1800	50		mg/L	50	3/6/2014 2:29:30 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/7/2014 3:02:03 PM
7440-23-5	Sodium	26000	500		mg/L	500	3/7/2014 3:03:47 PM
7440-66-6	Zinc	ND	0.050		mg/L	5	3/6/2014 2:27:33 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.12	0.010		mg/L	5	3/12/2014 1:29:53 PM
7440-43-9	Cadmium	ND	0.010		mg/L	5	3/12/2014 1:29:53 PM
7440-47-3	Chromium	ND	0.030		mg/L	5	3/12/2014 1:29:53 PM
7440-50-8	Copper	ND	0.030		mg/L	5	3/12/2014 1:29:53 PM
7439-89-6	Iron	0.28	0.10		mg/L	5	3/12/2014 1:29:53 PM
7439-96-5	Manganese	2.2	0.010	*	mg/L	5	3/12/2014 1:29:53 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/18/2014 3:24:54 PM
7440-66-6	Zinc	ND	0.050		mg/L	5	3/12/2014 3:35:12 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.11	0.10	*	mg/L	100	3/13/2014 3:05:52 PM
7439-92-1	Lead	ND	0.10		mg/L	100	3/13/2014 3:05:52 PM
7782-49-2	Selenium	0.12	0.10	*	mg/L	100	3/13/2014 3:05:52 PM
7440-61-1	Uranium	ND	0.10		mg/L	100	3/13/2014 3:05:52 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.12	0.10	*	mg/L	100	3/14/2014 3:47:42 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:15:00 PM
Lab ID: 1403198-005 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.10		mg/L	100	3/14/2014 3:47:42 PM
7782-49-2	Selenium	ND	0.10	*	mg/L	100	3/14/2014 3:47:42 PM
7440-61-1	Uranium	ND	0.10		mg/L	100	3/14/2014 3:47:42 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:36:43 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	13	2.0		mg/L	1	3/11/2014 2:36:00 PM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<1	1.000		CFU/100	1	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
208-96-8	Acenaphthylene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
62-53-3	Aniline	ND	10		µg/L	1	3/12/2014 4:23:49 PM
120-12-7	Anthracene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
103-33-3	Azobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
56-55-3	Benz(a)anthracene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
50-32-8	Benzo(a)pyrene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
205-99-2	Benzo(b)fluoranthene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
191-24-2	Benzo(g,h,i)perylene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
207-08-9	Benzo(k)fluoranthene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
65-85-0	Benzoic acid	ND	20		µg/L	1	3/12/2014 4:23:49 PM
100-51-6	Benzyl alcohol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/12/2014 4:23:49 PM
111-44-4	Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/12/2014 4:23:49 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/12/2014 4:23:49 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/12/2014 4:23:49 PM
101-55-3	4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 4:23:49 PM
85-68-7	Butyl benzyl phthalate	ND	10		µg/L	1	3/12/2014 4:23:49 PM
86-74-8	Carbazole	ND	10		µg/L	1	3/12/2014 4:23:49 PM
59-50-7	4-Chloro-3-methylphenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
106-47-8	4-Chloroaniline	ND	10		µg/L	1	3/12/2014 4:23:49 PM
91-58-7	2-Chloronaphthalene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
95-57-8	2-Chlorophenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 4:23:49 PM
218-01-9	Chrysene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
84-74-2	Di-n-butyl phthalate	ND	10		µg/L	1	3/12/2014 4:23:49 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:15:00 PM
Lab ID: 1403198-005 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	10		µg/L	1	3/12/2014 4:23:49 PM
53-70-3	Dibenz(a,h)anthracene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
132-64-9	Dibenzofuran	ND	10		µg/L	1	3/12/2014 4:23:49 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
91-94-1	3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/12/2014 4:23:49 PM
84-66-2	Diethyl phthalate	ND	10		µg/L	1	3/12/2014 4:23:49 PM
131-11-3	Dimethyl phthalate	ND	10		µg/L	1	3/12/2014 4:23:49 PM
120-83-2	2,4-Dichlorophenol	ND	20		µg/L	1	3/12/2014 4:23:49 PM
105-67-9	2,4-Dimethylphenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/12/2014 4:23:49 PM
51-28-5	2,4-Dinitrophenol	ND	20		µg/L	1	3/12/2014 4:23:49 PM
121-14-2	2,4-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
606-20-2	2,6-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
206-44-0	Fluoranthene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
86-73-7	Fluorene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
118-74-1	Hexachlorobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
77-47-4	Hexachlorocyclopentadiene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
67-72-1	Hexachloroethane	ND	10		µg/L	1	3/12/2014 4:23:49 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
78-59-1	Isophorone	ND	10		µg/L	1	3/12/2014 4:23:49 PM
90-12-0	1-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
91-57-6	2-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
95-48-7	2-Methylphenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
782-06-0	3+4-Methylphenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/12/2014 4:23:49 PM
62-75-9	N-Nitrosodimethylamine	ND	10		µg/L	1	3/12/2014 4:23:49 PM
86-30-6	N-Nitrosodiphenylamine	ND	10		µg/L	1	3/12/2014 4:23:49 PM
91-20-3	Naphthalene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
88-74-4	2-Nitroaniline	ND	10		µg/L	1	3/12/2014 4:23:49 PM
99-09-2	3-Nitroaniline	ND	10		µg/L	1	3/12/2014 4:23:49 PM
100-01-6	4-Nitroaniline	ND	10		µg/L	1	3/12/2014 4:23:49 PM
98-95-3	Nitrobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
88-75-5	2-Nitrophenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
100-02-7	4-Nitrophenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
87-86-5	Pentachlorophenol	ND	20		µg/L	1	3/12/2014 4:23:49 PM
85-01-8	Phenanthrene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
108-95-2	Phenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:15:00 PM
Lab ID: 1403198-005 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
110-86-1	Pyridine	ND	10		µg/L	1	3/12/2014 4:23:49 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/12/2014 4:23:49 PM
95-95-4	2,4,5-Trichlorophenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
88-06-2	2,4,6-Trichlorophenol	ND	10		µg/L	1	3/12/2014 4:23:49 PM
367-12-4	Surr: 2-Fluorophenol	43.9	22.7-98		%REC	1	3/12/2014 4:23:49 PM
4165-62-2	Surr: Phenol-d5	47.1	23.4-74.9		%REC	1	3/12/2014 4:23:49 PM
118-79-6	Surr: 2,4,6-Tribromophenol	51.3	23.3-111		%REC	1	3/12/2014 4:23:49 PM
4165-60-0	Surr: Nitrobenzene-d5	78.8	36.8-111		%REC	1	3/12/2014 4:23:49 PM
321-60-8	Surr: 2-Fluorobiphenyl	66.5	38.3-110		%REC	1	3/12/2014 4:23:49 PM
1718-51-0	Surr: 4-Terphenyl-d14	53.8	52.1-116		%REC	1	3/12/2014 4:23:49 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
108-88-3	Toluene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/10/2014 11:20:32 PM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/10/2014 11:20:32 PM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/10/2014 11:20:32 PM
91-20-3	Naphthalene	ND	20		µg/L	10	3/10/2014 11:20:32 PM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 11:20:32 PM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 11:20:32 PM
67-64-1	Acetone	ND	100		µg/L	10	3/10/2014 11:20:32 PM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-25-2	Bromoform	ND	10		µg/L	10	3/10/2014 11:20:32 PM
74-83-9	Bromomethane	ND	30		µg/L	10	3/10/2014 11:20:32 PM
78-93-3	2-Butanone	ND	100		µg/L	10	3/10/2014 11:20:32 PM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/10/2014 11:20:32 PM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/10/2014 11:20:32 PM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-00-3	Chloroethane	ND	20		µg/L	10	3/10/2014 11:20:32 PM
67-66-3	Chloroform	ND	10		µg/L	10	3/10/2014 11:20:32 PM
74-87-3	Chloromethane	ND	30		µg/L	10	3/10/2014 11:20:32 PM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/10/2014 11:20:32 PM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 11:20:32 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:15:00 PM
Lab ID: 1403198-005
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/10/2014 11:20:32 PM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/10/2014 11:20:32 PM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/10/2014 11:20:32 PM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/10/2014 11:20:32 PM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/10/2014 11:20:32 PM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/10/2014 11:20:32 PM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
100-42-5	Styrene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/10/2014 11:20:32 PM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/10/2014 11:20:32 PM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/10/2014 11:20:32 PM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 11:20:32 PM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/10/2014 11:20:32 PM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/10/2014 11:20:32 PM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/10/2014 11:20:32 PM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/10/2014 11:20:32 PM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/10/2014 11:20:32 PM
17060-07-0	Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	10	3/10/2014 11:20:32 PM
460-00-4	Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	10	3/10/2014 11:20:32 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-8
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:15:00 PM
Lab ID: 1403198-005
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	98.8	70-130		%REC	10	3/10/2014 11:20:32 PM
2037-26-5	Surr: Toluene-d8	91.0	70-130		%REC	10	3/10/2014 11:20:32 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	130000	0.25		µmhos/c	25	3/6/2014 6:42:52 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.82	1.68	H	pH units	1	3/6/2014 12:50:08 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:55:00 PM
Lab ID: 1403198-006
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	18	10	*	mg/L	100	3/7/2014 12:35:35 AM
16887-00-6	Chloride	56000	2500		mg/L	5000	3/12/2014 2:32:38 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	10		mg/L	100	3/7/2014 12:35:35 AM
24959-67-9	Bromide	20	10		mg/L	100	3/7/2014 12:35:35 AM
7727-37-9	Nitrogen, Nitrate (As N)	8.1	1.0		mg/L	10	3/7/2014 12:23:11 AM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/7/2014 12:23:11 AM
14808-79-8	Sulfate	7800	100		mg/L	200	3/12/2014 2:20:14 AM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.19	0.010		mg/L	5	3/6/2014 2:54:14 PM
7440-43-9	Cadmium	ND	0.010		mg/L	5	3/6/2014 2:54:14 PM
7440-70-2	Calcium	1400	50		mg/L	50	3/6/2014 2:56:17 PM
7440-47-3	Chromium	ND	0.030		mg/L	5	3/6/2014 2:54:14 PM
7440-50-8	Copper	ND	0.030		mg/L	5	3/6/2014 2:54:14 PM
7439-89-6	Iron	0.14	0.10		mg/L	5	3/6/2014 2:54:14 PM
7439-95-4	Magnesium	1100	50		mg/L	50	3/6/2014 2:56:17 PM
7439-96-5	Manganese	2.8	0.010	*	mg/L	5	3/6/2014 2:54:14 PM
7440-09-7	Potassium	1300	50		mg/L	50	3/7/2014 3:07:15 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/7/2014 3:05:30 PM
7440-23-5	Sodium	34000	500		mg/L	500	3/7/2014 3:09:13 PM
7440-66-6	Zinc	ND	0.050		mg/L	5	3/6/2014 2:54:14 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.18	0.010		mg/L	5	3/12/2014 1:38:31 PM
7440-43-9	Cadmium	ND	0.010		mg/L	5	3/12/2014 1:38:31 PM
7440-47-3	Chromium	ND	0.030		mg/L	5	3/12/2014 1:38:31 PM
7440-50-8	Copper	ND	0.030		mg/L	5	3/12/2014 1:38:31 PM
7439-89-6	Iron	0.26	0.10		mg/L	5	3/12/2014 1:38:31 PM
7439-96-5	Manganese	2.7	0.010	*	mg/L	5	3/12/2014 1:38:31 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/18/2014 3:32:10 PM
7440-66-6	Zinc	ND	0.050		mg/L	5	3/12/2014 3:38:46 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.10	0.10	*	mg/L	100	3/13/2014 3:08:38 PM
7439-92-1	Lead	ND	0.10		mg/L	100	3/13/2014 3:08:38 PM
7782-49-2	Selenium	0.13	0.10	*	mg/L	100	3/13/2014 3:08:38 PM
7440-61-1	Uranium	ND	0.10		mg/L	100	3/13/2014 3:08:38 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.12	0.10	*	mg/L	100	3/14/2014 3:51:08 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:55:00 PM
Lab ID: 1403198-006 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.10		mg/L	100	3/14/2014 3:51:08 PM
7782-49-2	Selenium	0.15	0.10	*	mg/L	100	3/14/2014 3:51:08 PM
7440-61-1	Uranium	ND	0.10		mg/L	100	3/14/2014 3:51:08 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:38:29 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	15	2.0		mg/L	1	3/11/2014 2:36:00 PM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<1	1.000		CFU/100	1	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
208-96-8	Acenaphthylene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
62-53-3	Aniline	ND	10		µg/L	1	3/12/2014 4:52:36 PM
120-12-7	Anthracene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
103-33-3	Azobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
56-55-3	Benz(a)anthracene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
50-32-8	Benzo(a)pyrene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
205-99-2	Benzo(b)fluoranthene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
191-24-2	Benzo(g,h,i)perylene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
207-08-9	Benzo(k)fluoranthene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
65-85-0	Benzoic acid	ND	20		µg/L	1	3/12/2014 4:52:36 PM
100-51-6	Benzyl alcohol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/12/2014 4:52:36 PM
111-44-4	Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/12/2014 4:52:36 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/12/2014 4:52:36 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/12/2014 4:52:36 PM
101-55-3	4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 4:52:36 PM
85-68-7	Butyl benzyl phthalate	ND	10		µg/L	1	3/12/2014 4:52:36 PM
86-74-8	Carbazole	ND	10		µg/L	1	3/12/2014 4:52:36 PM
59-50-7	4-Chloro-3-methylphenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
106-47-8	4-Chloroaniline	ND	10		µg/L	1	3/12/2014 4:52:36 PM
91-58-7	2-Chloronaphthalene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
95-57-8	2-Chlorophenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 4:52:36 PM
218-01-9	Chrysene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
84-74-2	Di-n-butyl phthalate	ND	10		µg/L	1	3/12/2014 4:52:36 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:55:00 PM
Lab ID: 1403198-006 **Matrix:** AQUEOUS **Received Date:** 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	10		µg/L	1	3/12/2014 4:52:36 PM
53-70-3	Dibenz(a,h)anthracene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
132-64-9	Dibenzofuran	ND	10		µg/L	1	3/12/2014 4:52:36 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
91-94-1	3,3´-Dichlorobenzidine	ND	10		µg/L	1	3/12/2014 4:52:36 PM
84-66-2	Diethyl phthalate	ND	10		µg/L	1	3/12/2014 4:52:36 PM
131-11-3	Dimethyl phthalate	ND	10		µg/L	1	3/12/2014 4:52:36 PM
120-83-2	2,4-Dichlorophenol	ND	20		µg/L	1	3/12/2014 4:52:36 PM
105-67-9	2,4-Dimethylphenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/12/2014 4:52:36 PM
51-28-5	2,4-Dinitrophenol	ND	20		µg/L	1	3/12/2014 4:52:36 PM
121-14-2	2,4-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
606-20-2	2,6-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
206-44-0	Fluoranthene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
86-73-7	Fluorene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
118-74-1	Hexachlorobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
77-47-4	Hexachlorocyclopentadiene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
67-72-1	Hexachloroethane	ND	10		µg/L	1	3/12/2014 4:52:36 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
78-59-1	Isophorone	ND	10		µg/L	1	3/12/2014 4:52:36 PM
90-12-0	1-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
91-57-6	2-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
95-48-7	2-Methylphenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
782-06-0	3+4-Methylphenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/12/2014 4:52:36 PM
62-75-9	N-Nitrosodimethylamine	ND	10		µg/L	1	3/12/2014 4:52:36 PM
86-30-6	N-Nitrosodiphenylamine	ND	10		µg/L	1	3/12/2014 4:52:36 PM
91-20-3	Naphthalene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
88-74-4	2-Nitroaniline	ND	10		µg/L	1	3/12/2014 4:52:36 PM
99-09-2	3-Nitroaniline	ND	10		µg/L	1	3/12/2014 4:52:36 PM
100-01-6	4-Nitroaniline	ND	10		µg/L	1	3/12/2014 4:52:36 PM
98-95-3	Nitrobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
88-75-5	2-Nitrophenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
100-02-7	4-Nitrophenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
87-86-5	Pentachlorophenol	ND	20		µg/L	1	3/12/2014 4:52:36 PM
85-01-8	Phenanthrene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
108-95-2	Phenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:55:00 PM
Lab ID: 1403198-006
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
110-86-1	Pyridine	ND	10		µg/L	1	3/12/2014 4:52:36 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	1	3/12/2014 4:52:36 PM
95-95-4	2,4,5-Trichlorophenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
88-06-2	2,4,6-Trichlorophenol	ND	10		µg/L	1	3/12/2014 4:52:36 PM
367-12-4	Surr: 2-Fluorophenol	47.9	22.7-98		%REC	1	3/12/2014 4:52:36 PM
4165-62-2	Surr: Phenol-d5	46.4	23.4-74.9		%REC	1	3/12/2014 4:52:36 PM
118-79-6	Surr: 2,4,6-Tribromophenol	67.4	23.3-111		%REC	1	3/12/2014 4:52:36 PM
4165-60-0	Surr: Nitrobenzene-d5	69.4	36.8-111		%REC	1	3/12/2014 4:52:36 PM
321-60-8	Surr: 2-Fluorobiphenyl	63.6	38.3-110		%REC	1	3/12/2014 4:52:36 PM
1718-51-0	Surr: 4-Terphenyl-d14	45.4	52.1-116	S	%REC	1	3/12/2014 4:52:36 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
108-88-3	Toluene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/10/2014 11:48:25 PM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/10/2014 11:48:25 PM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/10/2014 11:48:25 PM
91-20-3	Naphthalene	ND	20		µg/L	10	3/10/2014 11:48:25 PM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 11:48:25 PM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/10/2014 11:48:25 PM
67-64-1	Acetone	ND	100		µg/L	10	3/10/2014 11:48:25 PM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-25-2	Bromoform	ND	10		µg/L	10	3/10/2014 11:48:25 PM
74-83-9	Bromomethane	ND	30		µg/L	10	3/10/2014 11:48:25 PM
78-93-3	2-Butanone	ND	100		µg/L	10	3/10/2014 11:48:25 PM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/10/2014 11:48:25 PM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/10/2014 11:48:25 PM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-00-3	Chloroethane	ND	20		µg/L	10	3/10/2014 11:48:25 PM
67-66-3	Chloroform	ND	10		µg/L	10	3/10/2014 11:48:25 PM
74-87-3	Chloromethane	ND	30		µg/L	10	3/10/2014 11:48:25 PM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/10/2014 11:48:25 PM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 11:48:25 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:55:00 PM
Lab ID: 1403198-006
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/10/2014 11:48:25 PM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/10/2014 11:48:25 PM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/10/2014 11:48:25 PM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/10/2014 11:48:25 PM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/10/2014 11:48:25 PM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/10/2014 11:48:25 PM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
100-42-5	Styrene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/10/2014 11:48:25 PM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/10/2014 11:48:25 PM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/10/2014 11:48:25 PM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/10/2014 11:48:25 PM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/10/2014 11:48:25 PM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/10/2014 11:48:25 PM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/10/2014 11:48:25 PM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/10/2014 11:48:25 PM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/10/2014 11:48:25 PM
17060-07-0	Surr: 1,2-Dichloroethane-d4	90.1	70-130		%REC	10	3/10/2014 11:48:25 PM
460-00-4	Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	10	3/10/2014 11:48:25 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-9
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 12:55:00 PM
Lab ID: 1403198-006
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	98.2	70-130		%REC	10	3/10/2014 11:48:25 PM
2037-26-5	Surr: Toluene-d8	91.1	70-130		%REC	10	3/10/2014 11:48:25 PM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	160000	0.25		µmhos/c	25	3/6/2014 6:47:10 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.70	1.68	H	pH units	1	3/6/2014 12:54:08 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:50:00 AM
Lab ID: 1403198-007
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	22	1.0	*	mg/L	10	3/7/2014 12:48:00 AM
16887-00-6	Chloride	10000	500		mg/L	1000	3/12/2014 2:45:03 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	10		mg/L	100	3/7/2014 1:00:25 AM
24959-67-9	Bromide	6.3	1.0		mg/L	10	3/7/2014 12:48:00 AM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/7/2014 12:48:00 AM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/7/2014 12:48:00 AM
14808-79-8	Sulfate	4300	50		mg/L	100	3/7/2014 1:00:25 AM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.074	0.0020		mg/L	1	3/6/2014 2:58:11 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 2:58:11 PM
7440-70-2	Calcium	330	5.0		mg/L	5	3/6/2014 3:00:18 PM
7440-47-3	Chromium	0.011	0.0060		mg/L	1	3/6/2014 2:58:11 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 2:58:11 PM
7439-89-6	Iron	0.48	0.020	*	mg/L	1	3/6/2014 2:58:11 PM
7439-95-4	Magnesium	230	5.0		mg/L	5	3/6/2014 3:00:18 PM
7439-96-5	Manganese	0.99	0.010	*	mg/L	5	3/6/2014 3:00:18 PM
7440-09-7	Potassium	430	50		mg/L	50	3/7/2014 3:12:43 PM
7440-22-4	Silver	ND	0.025		mg/L	5	3/11/2014 3:12:15 PM
7440-23-5	Sodium	7900	500		mg/L	500	3/7/2014 3:14:34 PM
7440-66-6	Zinc	0.013	0.010		mg/L	1	3/6/2014 2:58:11 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.081	0.0020		mg/L	1	3/12/2014 1:59:15 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/12/2014 1:59:15 PM
7440-47-3	Chromium	0.013	0.0060		mg/L	1	3/12/2014 1:59:15 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/12/2014 1:59:15 PM
7439-89-6	Iron	0.79	0.020	*	mg/L	1	3/12/2014 1:59:15 PM
7439-96-5	Manganese	0.99	0.0020	*	mg/L	1	3/12/2014 1:59:15 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:38:19 PM
7440-66-6	Zinc	0.019	0.010		mg/L	1	3/12/2014 3:47:08 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.040	0.010	*	mg/L	10	3/13/2014 3:11:23 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 3:11:23 PM
7782-49-2	Selenium	0.039	0.010		mg/L	10	3/13/2014 3:11:23 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 3:11:23 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.042	0.010	*	mg/L	10	3/14/2014 3:54:35 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:50:00 AM
Lab ID: 1403198-007
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.010		mg/L	10	3/14/2014 3:54:35 PM
7782-49-2	Selenium	0.041	0.010		mg/L	10	3/14/2014 3:54:35 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/14/2014 3:54:35 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:47:53 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	48	2.0		mg/L	1	3/11/2014 2:36:00 PM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<10	10.00		CFU/100	10	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
208-96-8	Acenaphthylene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
62-53-3	Aniline	ND	50		µg/L	1	3/12/2014 6:48:43 PM
120-12-7	Anthracene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
103-33-3	Azobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
56-55-3	Benz(a)anthracene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
50-32-8	Benzo(a)pyrene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
205-99-2	Benzo(b)fluoranthene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
191-24-2	Benzo(g,h,i)perylene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
207-08-9	Benzo(k)fluoranthene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
65-85-0	Benzoic acid	ND	100		µg/L	1	3/12/2014 6:48:43 PM
100-51-6	Benzyl alcohol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	50		µg/L	1	3/12/2014 6:48:43 PM
111-44-4	Bis(2-chloroethyl)ether	ND	50		µg/L	1	3/12/2014 6:48:43 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	3/12/2014 6:48:43 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	50		µg/L	1	3/12/2014 6:48:43 PM
101-55-3	4-Bromophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 6:48:43 PM
85-68-7	Butyl benzyl phthalate	ND	50		µg/L	1	3/12/2014 6:48:43 PM
86-74-8	Carbazole	ND	50		µg/L	1	3/12/2014 6:48:43 PM
59-50-7	4-Chloro-3-methylphenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
106-47-8	4-Chloroaniline	ND	50		µg/L	1	3/12/2014 6:48:43 PM
91-58-7	2-Chloronaphthalene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
95-57-8	2-Chlorophenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 6:48:43 PM
218-01-9	Chrysene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
84-74-2	Di-n-butyl phthalate	ND	50		µg/L	1	3/12/2014 6:48:43 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:50:00 AM
Lab ID: 1403198-007
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	50		µg/L	1	3/12/2014 6:48:43 PM
53-70-3	Dibenz(a,h)anthracene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
132-64-9	Dibenzofuran	ND	50		µg/L	1	3/12/2014 6:48:43 PM
95-50-1	1,2-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
541-73-1	1,3-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
106-46-7	1,4-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
91-94-1	3,3´-Dichlorobenzidine	ND	50		µg/L	1	3/12/2014 6:48:43 PM
84-66-2	Diethyl phthalate	ND	50		µg/L	1	3/12/2014 6:48:43 PM
131-11-3	Dimethyl phthalate	ND	50		µg/L	1	3/12/2014 6:48:43 PM
120-83-2	2,4-Dichlorophenol	ND	100		µg/L	1	3/12/2014 6:48:43 PM
105-67-9	2,4-Dimethylphenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	3/12/2014 6:48:43 PM
51-28-5	2,4-Dinitrophenol	ND	100		µg/L	1	3/12/2014 6:48:43 PM
121-14-2	2,4-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
606-20-2	2,6-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
206-44-0	Fluoranthene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
86-73-7	Fluorene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
118-74-1	Hexachlorobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
87-68-3	Hexachlorobutadiene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
77-47-4	Hexachlorocyclopentadiene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
67-72-1	Hexachloroethane	ND	50		µg/L	1	3/12/2014 6:48:43 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
78-59-1	Isophorone	ND	50		µg/L	1	3/12/2014 6:48:43 PM
90-12-0	1-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
91-57-6	2-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
95-48-7	2-Methylphenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
782-06-0	3+4-Methylphenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	50		µg/L	1	3/12/2014 6:48:43 PM
62-75-9	N-Nitrosodimethylamine	ND	50		µg/L	1	3/12/2014 6:48:43 PM
86-30-6	N-Nitrosodiphenylamine	ND	50		µg/L	1	3/12/2014 6:48:43 PM
91-20-3	Naphthalene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
88-74-4	2-Nitroaniline	ND	50		µg/L	1	3/12/2014 6:48:43 PM
99-09-2	3-Nitroaniline	ND	50		µg/L	1	3/12/2014 6:48:43 PM
100-01-6	4-Nitroaniline	ND	50		µg/L	1	3/12/2014 6:48:43 PM
98-95-3	Nitrobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
88-75-5	2-Nitrophenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
100-02-7	4-Nitrophenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
87-86-5	Pentachlorophenol	ND	100		µg/L	1	3/12/2014 6:48:43 PM
85-01-8	Phenanthrene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
108-95-2	Phenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:50:00 AM
Lab ID: 1403198-007
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
110-86-1	Pyridine	ND	50		µg/L	1	3/12/2014 6:48:43 PM
120-82-1	1,2,4-Trichlorobenzene	ND	50		µg/L	1	3/12/2014 6:48:43 PM
95-95-4	2,4,5-Trichlorophenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
88-06-2	2,4,6-Trichlorophenol	ND	50		µg/L	1	3/12/2014 6:48:43 PM
367-12-4	Surr: 2-Fluorophenol	56.1	22.7-98		%REC	1	3/12/2014 6:48:43 PM
4165-62-2	Surr: Phenol-d5	41.9	23.4-74.9		%REC	1	3/12/2014 6:48:43 PM
118-79-6	Surr: 2,4,6-Tribromophenol	85.2	23.3-111		%REC	1	3/12/2014 6:48:43 PM
4165-60-0	Surr: Nitrobenzene-d5	89.1	36.8-111		%REC	1	3/12/2014 6:48:43 PM
321-60-8	Surr: 2-Fluorobiphenyl	84.2	38.3-110		%REC	1	3/12/2014 6:48:43 PM
1718-51-0	Surr: 4-Terphenyl-d14	79.2	52.1-116		%REC	1	3/12/2014 6:48:43 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
108-88-3	Toluene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/11/2014 2:07:57 AM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/11/2014 2:07:57 AM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/11/2014 2:07:57 AM
91-20-3	Naphthalene	ND	20		µg/L	10	3/11/2014 2:07:57 AM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/11/2014 2:07:57 AM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/11/2014 2:07:57 AM
67-64-1	Acetone	ND	100		µg/L	10	3/11/2014 2:07:57 AM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-25-2	Bromoform	ND	10		µg/L	10	3/11/2014 2:07:57 AM
74-83-9	Bromomethane	ND	30		µg/L	10	3/11/2014 2:07:57 AM
78-93-3	2-Butanone	ND	100		µg/L	10	3/11/2014 2:07:57 AM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/11/2014 2:07:57 AM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/11/2014 2:07:57 AM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-00-3	Chloroethane	ND	20		µg/L	10	3/11/2014 2:07:57 AM
67-66-3	Chloroform	ND	10		µg/L	10	3/11/2014 2:07:57 AM
74-87-3	Chloromethane	ND	30		µg/L	10	3/11/2014 2:07:57 AM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/11/2014 2:07:57 AM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/11/2014 2:07:57 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:50:00 AM
Lab ID: 1403198-007
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/11/2014 2:07:57 AM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/11/2014 2:07:57 AM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/11/2014 2:07:57 AM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/11/2014 2:07:57 AM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/11/2014 2:07:57 AM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/11/2014 2:07:57 AM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
100-42-5	Styrene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/11/2014 2:07:57 AM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/11/2014 2:07:57 AM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/11/2014 2:07:57 AM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/11/2014 2:07:57 AM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/11/2014 2:07:57 AM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/11/2014 2:07:57 AM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/11/2014 2:07:57 AM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/11/2014 2:07:57 AM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/11/2014 2:07:57 AM
17060-07-0	Surr: 1,2-Dichloroethane-d4	90.5	70-130		%REC	10	3/11/2014 2:07:57 AM
460-00-4	Surr: 4-Bromofluorobenzene	92.3	70-130		%REC	10	3/11/2014 2:07:57 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-11
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:50:00 AM
Lab ID: 1403198-007
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	94.8	70-130		%REC	10	3/11/2014 2:07:57 AM
2037-26-5	Surr: Toluene-d8	89.8	70-130		%REC	10	3/11/2014 2:07:57 AM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	36000	0.050		µmhos/c	5	3/6/2014 2:24:39 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.76	1.68	H	pH units	1	3/6/2014 12:58:04 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:25:00 AM
Lab ID: 1403198-008
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	34	10	*	mg/L	100	3/7/2014 1:50:04 AM
16887-00-6	Chloride	1800	50		mg/L	100	3/7/2014 1:50:04 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/7/2014 1:37:39 AM
24959-67-9	Bromide	2.3	1.0		mg/L	10	3/7/2014 1:37:39 AM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/7/2014 1:37:39 AM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/7/2014 1:37:39 AM
14808-79-8	Sulfate	1100	50		mg/L	100	3/7/2014 1:50:04 AM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.055	0.0020		mg/L	1	3/6/2014 3:04:09 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 3:04:09 PM
7440-70-2	Calcium	67	1.0		mg/L	1	3/6/2014 3:04:09 PM
7440-47-3	Chromium	0.011	0.0060		mg/L	1	3/6/2014 3:04:09 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 3:04:09 PM
7439-89-6	Iron	1.4	0.10	*	mg/L	5	3/6/2014 3:05:58 PM
7439-95-4	Magnesium	34	1.0		mg/L	1	3/6/2014 3:04:09 PM
7439-96-5	Manganese	1.0	0.0020	*	mg/L	1	3/6/2014 3:04:09 PM
7440-09-7	Potassium	170	50		mg/L	50	3/7/2014 3:18:05 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/7/2014 3:16:18 PM
7440-23-5	Sodium	1700	50		mg/L	50	3/7/2014 3:18:05 PM
7440-66-6	Zinc	0.015	0.010		mg/L	1	3/6/2014 3:04:09 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.059	0.0020		mg/L	1	3/10/2014 5:59:59 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/10/2014 5:59:59 PM
7440-47-3	Chromium	0.014	0.0060		mg/L	1	3/12/2014 2:03:14 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/10/2014 5:59:59 PM
7439-89-6	Iron	1.9	0.10	*	mg/L	5	3/12/2014 2:05:05 PM
7439-96-5	Manganese	0.95	0.0020	*	mg/L	1	3/10/2014 5:59:59 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:39:19 PM
7440-66-6	Zinc	0.021	0.010		mg/L	1	3/12/2014 3:48:49 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.016	0.010	*	mg/L	10	3/13/2014 3:14:08 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 3:14:08 PM
7782-49-2	Selenium	0.017	0.010		mg/L	10	3/13/2014 3:14:08 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 3:14:08 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.019	0.010	*	mg/L	10	3/14/2014 3:58:02 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:25:00 AM
Lab ID: 1403198-008
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.010		mg/L	10	3/14/2014 3:58:02 PM
7782-49-2	Selenium	0.020	0.010		mg/L	10	3/14/2014 3:58:02 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/14/2014 3:58:02 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:49:39 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	210	2.0		mg/L	1	3/11/2014 11:16:00 AM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<10	10.00		CFU/100	10	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
208-96-8	Acenaphthylene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
62-53-3	Aniline	ND	50		µg/L	1	3/12/2014 7:17:56 PM
120-12-7	Anthracene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
103-33-3	Azobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
56-55-3	Benz(a)anthracene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
50-32-8	Benzo(a)pyrene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
205-99-2	Benzo(b)fluoranthene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
191-24-2	Benzo(g,h,i)perylene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
207-08-9	Benzo(k)fluoranthene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
65-85-0	Benzoic acid	ND	100		µg/L	1	3/12/2014 7:17:56 PM
100-51-6	Benzyl alcohol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	50		µg/L	1	3/12/2014 7:17:56 PM
111-44-4	Bis(2-chloroethyl)ether	ND	50		µg/L	1	3/12/2014 7:17:56 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	3/12/2014 7:17:56 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	50		µg/L	1	3/12/2014 7:17:56 PM
101-55-3	4-Bromophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 7:17:56 PM
85-68-7	Butyl benzyl phthalate	ND	50		µg/L	1	3/12/2014 7:17:56 PM
86-74-8	Carbazole	ND	50		µg/L	1	3/12/2014 7:17:56 PM
59-50-7	4-Chloro-3-methylphenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
106-47-8	4-Chloroaniline	ND	50		µg/L	1	3/12/2014 7:17:56 PM
91-58-7	2-Chloronaphthalene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
95-57-8	2-Chlorophenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 7:17:56 PM
218-01-9	Chrysene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
84-74-2	Di-n-butyl phthalate	ND	50		µg/L	1	3/12/2014 7:17:56 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:25:00 AM
Lab ID: 1403198-008
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	50		µg/L	1	3/12/2014 7:17:56 PM
53-70-3	Dibenz(a,h)anthracene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
132-64-9	Dibenzofuran	ND	50		µg/L	1	3/12/2014 7:17:56 PM
95-50-1	1,2-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
541-73-1	1,3-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
106-46-7	1,4-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
91-94-1	3,3´-Dichlorobenzidine	ND	50		µg/L	1	3/12/2014 7:17:56 PM
84-66-2	Diethyl phthalate	ND	50		µg/L	1	3/12/2014 7:17:56 PM
131-11-3	Dimethyl phthalate	ND	50		µg/L	1	3/12/2014 7:17:56 PM
120-83-2	2,4-Dichlorophenol	ND	100		µg/L	1	3/12/2014 7:17:56 PM
105-67-9	2,4-Dimethylphenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	3/12/2014 7:17:56 PM
51-28-5	2,4-Dinitrophenol	ND	100		µg/L	1	3/12/2014 7:17:56 PM
121-14-2	2,4-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
606-20-2	2,6-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
206-44-0	Fluoranthene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
86-73-7	Fluorene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
118-74-1	Hexachlorobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
87-68-3	Hexachlorobutadiene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
77-47-4	Hexachlorocyclopentadiene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
67-72-1	Hexachloroethane	ND	50		µg/L	1	3/12/2014 7:17:56 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
78-59-1	Isophorone	ND	50		µg/L	1	3/12/2014 7:17:56 PM
90-12-0	1-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
91-57-6	2-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
95-48-7	2-Methylphenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
782-06-0	3+4-Methylphenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	50		µg/L	1	3/12/2014 7:17:56 PM
62-75-9	N-Nitrosodimethylamine	ND	50		µg/L	1	3/12/2014 7:17:56 PM
86-30-6	N-Nitrosodiphenylamine	ND	50		µg/L	1	3/12/2014 7:17:56 PM
91-20-3	Naphthalene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
88-74-4	2-Nitroaniline	ND	50		µg/L	1	3/12/2014 7:17:56 PM
99-09-2	3-Nitroaniline	ND	50		µg/L	1	3/12/2014 7:17:56 PM
100-01-6	4-Nitroaniline	ND	50		µg/L	1	3/12/2014 7:17:56 PM
98-95-3	Nitrobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
88-75-5	2-Nitrophenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
100-02-7	4-Nitrophenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
87-86-5	Pentachlorophenol	ND	100		µg/L	1	3/12/2014 7:17:56 PM
85-01-8	Phenanthrene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
108-95-2	Phenol	200	50		µg/L	1	3/12/2014 7:17:56 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:25:00 AM
Lab ID: 1403198-008
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
110-86-1	Pyridine	ND	50		µg/L	1	3/12/2014 7:17:56 PM
120-82-1	1,2,4-Trichlorobenzene	ND	50		µg/L	1	3/12/2014 7:17:56 PM
95-95-4	2,4,5-Trichlorophenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
88-06-2	2,4,6-Trichlorophenol	ND	50		µg/L	1	3/12/2014 7:17:56 PM
367-12-4	Surr: 2-Fluorophenol	35.1	22.7-98		%REC	1	3/12/2014 7:17:56 PM
4165-62-2	Surr: Phenol-d5	28.2	23.4-74.9		%REC	1	3/12/2014 7:17:56 PM
118-79-6	Surr: 2,4,6-Tribromophenol	69.0	23.3-111		%REC	1	3/12/2014 7:17:56 PM
4165-60-0	Surr: Nitrobenzene-d5	56.1	36.8-111		%REC	1	3/12/2014 7:17:56 PM
321-60-8	Surr: 2-Fluorobiphenyl	57.3	38.3-110		%REC	1	3/12/2014 7:17:56 PM
1718-51-0	Surr: 4-Terphenyl-d14	61.0	52.1-116		%REC	1	3/12/2014 7:17:56 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
108-88-3	Toluene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/11/2014 2:35:53 AM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/11/2014 2:35:53 AM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/11/2014 2:35:53 AM
91-20-3	Naphthalene	ND	20		µg/L	10	3/11/2014 2:35:53 AM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/11/2014 2:35:53 AM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/11/2014 2:35:53 AM
67-64-1	Acetone	ND	100		µg/L	10	3/11/2014 2:35:53 AM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-25-2	Bromoform	ND	10		µg/L	10	3/11/2014 2:35:53 AM
74-83-9	Bromomethane	ND	30		µg/L	10	3/11/2014 2:35:53 AM
78-93-3	2-Butanone	ND	100		µg/L	10	3/11/2014 2:35:53 AM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/11/2014 2:35:53 AM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/11/2014 2:35:53 AM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-00-3	Chloroethane	ND	20		µg/L	10	3/11/2014 2:35:53 AM
67-66-3	Chloroform	ND	10		µg/L	10	3/11/2014 2:35:53 AM
74-87-3	Chloromethane	ND	30		µg/L	10	3/11/2014 2:35:53 AM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/11/2014 2:35:53 AM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/11/2014 2:35:53 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:25:00 AM
Lab ID: 1403198-008
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/11/2014 2:35:53 AM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/11/2014 2:35:53 AM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/11/2014 2:35:53 AM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/11/2014 2:35:53 AM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/11/2014 2:35:53 AM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/11/2014 2:35:53 AM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
100-42-5	Styrene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/11/2014 2:35:53 AM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/11/2014 2:35:53 AM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/11/2014 2:35:53 AM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/11/2014 2:35:53 AM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/11/2014 2:35:53 AM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/11/2014 2:35:53 AM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/11/2014 2:35:53 AM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/11/2014 2:35:53 AM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/11/2014 2:35:53 AM
17060-07-0	Surr: 1,2-Dichloroethane-d4	90.2	70-130		%REC	10	3/11/2014 2:35:53 AM
460-00-4	Surr: 4-Bromofluorobenzene	92.9	70-130		%REC	10	3/11/2014 2:35:53 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12A
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:25:00 AM
Lab ID: 1403198-008
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	94.1	70-130		%REC	10	3/11/2014 2:35:53 AM
2037-26-5	Surr: Toluene-d8	89.4	70-130		%REC	10	3/11/2014 2:35:53 AM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	8000	0.010		µmhos/c	1	3/6/2014 1:02:08 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.90	1.68	H	pH units	1	3/6/2014 1:02:08 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:00:00 AM
Lab ID: 1403198-009
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
16984-48-8	Fluoride	38	10	*	mg/L	100	3/7/2014 2:14:54 AM
16887-00-6	Chloride	1800	50		mg/L	100	3/7/2014 2:14:54 AM
7727-37-9	Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/7/2014 2:02:29 AM
24959-67-9	Bromide	2.7	1.0		mg/L	10	3/7/2014 2:02:29 AM
7727-37-9	Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/7/2014 2:02:29 AM
7723-14-0	Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/7/2014 2:02:29 AM
14808-79-8	Sulfate	710	50		mg/L	100	3/7/2014 2:14:54 AM
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.073	0.0020		mg/L	1	3/6/2014 3:20:14 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 3:20:14 PM
7440-70-2	Calcium	59	1.0		mg/L	1	3/6/2014 3:20:14 PM
7440-47-3	Chromium	0.013	0.0060		mg/L	1	3/6/2014 3:20:14 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 3:20:14 PM
7439-89-6	Iron	0.61	0.020	*	mg/L	1	3/6/2014 3:20:14 PM
7439-95-4	Magnesium	32	1.0		mg/L	1	3/6/2014 3:20:14 PM
7439-96-5	Manganese	0.57	0.0020	*	mg/L	1	3/6/2014 3:20:14 PM
7440-09-7	Potassium	160	5.0		mg/L	5	3/7/2014 3:31:33 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/11/2014 3:10:19 PM
7440-23-5	Sodium	1600	50		mg/L	50	3/7/2014 3:33:27 PM
7440-66-6	Zinc	ND	0.010		mg/L	1	3/6/2014 3:20:14 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.080	0.0020		mg/L	1	3/10/2014 6:01:42 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/10/2014 6:01:42 PM
7440-47-3	Chromium	0.013	0.0060		mg/L	1	3/12/2014 2:07:03 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/10/2014 6:01:42 PM
7439-89-6	Iron	1.2	0.10	*	mg/L	5	3/12/2014 2:08:53 PM
7439-96-5	Manganese	0.55	0.0020	*	mg/L	1	3/10/2014 6:01:42 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:40:19 PM
7440-66-6	Zinc	0.014	0.010		mg/L	1	3/12/2014 3:50:09 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	0.012	0.010	*	mg/L	10	3/13/2014 3:16:54 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 3:16:54 PM
7782-49-2	Selenium	0.017	0.010		mg/L	10	3/13/2014 3:16:54 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 3:16:54 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.014	0.010	*	mg/L	10	3/14/2014 4:08:25 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:00:00 AM
Lab ID: 1403198-009
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7439-92-1	Lead	ND	0.010		mg/L	10	3/14/2014 4:08:25 PM
7782-49-2	Selenium	0.014	0.010		mg/L	10	3/14/2014 4:08:25 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/14/2014 4:08:25 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:51:25 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	430	2.0		mg/L	1	3/11/2014 11:16:00 AM
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **ECH**
1101	E. Coli	<10	10.00		CFU/100	10	3/6/2014 6:40:00 PM
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
83-32-9	Acenaphthene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
208-96-8	Acenaphthylene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
62-53-3	Aniline	ND	50		µg/L	1	3/12/2014 7:46:54 PM
120-12-7	Anthracene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
103-33-3	Azobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
56-55-3	Benz(a)anthracene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
50-32-8	Benzo(a)pyrene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
205-99-2	Benzo(b)fluoranthene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
191-24-2	Benzo(g,h,i)perylene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
207-08-9	Benzo(k)fluoranthene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
65-85-0	Benzoic acid	ND	100		µg/L	1	3/12/2014 7:46:54 PM
100-51-6	Benzyl alcohol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
111-91-1	Bis(2-chloroethoxy)methane	ND	50		µg/L	1	3/12/2014 7:46:54 PM
111-44-4	Bis(2-chloroethyl)ether	ND	50		µg/L	1	3/12/2014 7:46:54 PM
108-60-1	Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	3/12/2014 7:46:54 PM
117-81-7	Bis(2-ethylhexyl)phthalate	ND	50		µg/L	1	3/12/2014 7:46:54 PM
101-55-3	4-Bromophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 7:46:54 PM
85-68-7	Butyl benzyl phthalate	ND	50		µg/L	1	3/12/2014 7:46:54 PM
86-74-8	Carbazole	ND	50		µg/L	1	3/12/2014 7:46:54 PM
59-50-7	4-Chloro-3-methylphenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
106-47-8	4-Chloroaniline	ND	50		µg/L	1	3/12/2014 7:46:54 PM
91-58-7	2-Chloronaphthalene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
95-57-8	2-Chlorophenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
7005-72-3	4-Chlorophenyl phenyl ether	ND	50		µg/L	1	3/12/2014 7:46:54 PM
218-01-9	Chrysene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
84-74-2	Di-n-butyl phthalate	ND	50		µg/L	1	3/12/2014 7:46:54 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:00:00 AM
Lab ID: 1403198-009
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
117-84-0	Di-n-octyl phthalate	ND	50		µg/L	1	3/12/2014 7:46:54 PM
53-70-3	Dibenz(a,h)anthracene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
132-64-9	Dibenzofuran	ND	50		µg/L	1	3/12/2014 7:46:54 PM
95-50-1	1,2-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
541-73-1	1,3-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
106-46-7	1,4-Dichlorobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
91-94-1	3,3´-Dichlorobenzidine	ND	50		µg/L	1	3/12/2014 7:46:54 PM
84-66-2	Diethyl phthalate	ND	50		µg/L	1	3/12/2014 7:46:54 PM
131-11-3	Dimethyl phthalate	ND	50		µg/L	1	3/12/2014 7:46:54 PM
120-83-2	2,4-Dichlorophenol	ND	100		µg/L	1	3/12/2014 7:46:54 PM
105-67-9	2,4-Dimethylphenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
534-52-1	4,6-Dinitro-2-methylphenol	ND	100		µg/L	1	3/12/2014 7:46:54 PM
51-28-5	2,4-Dinitrophenol	ND	100		µg/L	1	3/12/2014 7:46:54 PM
121-14-2	2,4-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
606-20-2	2,6-Dinitrotoluene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
206-44-0	Fluoranthene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
86-73-7	Fluorene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
118-74-1	Hexachlorobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
87-68-3	Hexachlorobutadiene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
77-47-4	Hexachlorocyclopentadiene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
67-72-1	Hexachloroethane	ND	50		µg/L	1	3/12/2014 7:46:54 PM
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
78-59-1	Isophorone	ND	50		µg/L	1	3/12/2014 7:46:54 PM
90-12-0	1-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
91-57-6	2-Methylnaphthalene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
95-48-7	2-Methylphenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
782-06-0	3+4-Methylphenol	79	50		µg/L	1	3/12/2014 7:46:54 PM
621-64-7	N-Nitrosodi-n-propylamine	ND	50		µg/L	1	3/12/2014 7:46:54 PM
62-75-9	N-Nitrosodimethylamine	ND	50		µg/L	1	3/12/2014 7:46:54 PM
86-30-6	N-Nitrosodiphenylamine	ND	50		µg/L	1	3/12/2014 7:46:54 PM
91-20-3	Naphthalene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
88-74-4	2-Nitroaniline	ND	50		µg/L	1	3/12/2014 7:46:54 PM
99-09-2	3-Nitroaniline	ND	50		µg/L	1	3/12/2014 7:46:54 PM
100-01-6	4-Nitroaniline	ND	50		µg/L	1	3/12/2014 7:46:54 PM
98-95-3	Nitrobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
88-75-5	2-Nitrophenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
100-02-7	4-Nitrophenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
87-86-5	Pentachlorophenol	ND	100		µg/L	1	3/12/2014 7:46:54 PM
85-01-8	Phenanthrene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
108-95-2	Phenol	600	50		µg/L	1	3/12/2014 7:46:54 PM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:00:00 AM
Lab ID: 1403198-009
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES							Analyst: **DAM**
129-00-0	Pyrene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
110-86-1	Pyridine	ND	50		µg/L	1	3/12/2014 7:46:54 PM
120-82-1	1,2,4-Trichlorobenzene	ND	50		µg/L	1	3/12/2014 7:46:54 PM
95-95-4	2,4,5-Trichlorophenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
88-06-2	2,4,6-Trichlorophenol	ND	50		µg/L	1	3/12/2014 7:46:54 PM
367-12-4	Surr: 2-Fluorophenol	52.3	22.7-98		%REC	1	3/12/2014 7:46:54 PM
4165-62-2	Surr: Phenol-d5	42.3	23.4-74.9		%REC	1	3/12/2014 7:46:54 PM
118-79-6	Surr: 2,4,6-Tribromophenol	83.1	23.3-111		%REC	1	3/12/2014 7:46:54 PM
4165-60-0	Surr: Nitrobenzene-d5	81.2	36.8-111		%REC	1	3/12/2014 7:46:54 PM
321-60-8	Surr: 2-Fluorobiphenyl	74.6	38.3-110		%REC	1	3/12/2014 7:46:54 PM
1718-51-0	Surr: 4-Terphenyl-d14	72.0	52.1-116		%REC	1	3/12/2014 7:46:54 PM
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
108-88-3	Toluene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
100-41-4	Ethylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	3/11/2014 3:03:59 AM
95-63-6	1,2,4-Trimethylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
108-67-8	1,3,5-Trimethylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
107-06-2	1,2-Dichloroethane (EDC)	ND	10		µg/L	10	3/11/2014 3:03:59 AM
106-93-4	1,2-Dibromoethane (EDB)	ND	10		µg/L	10	3/11/2014 3:03:59 AM
91-20-3	Naphthalene	ND	20		µg/L	10	3/11/2014 3:03:59 AM
90-12-0	1-Methylnaphthalene	ND	40		µg/L	10	3/11/2014 3:03:59 AM
91-57-6	2-Methylnaphthalene	ND	40		µg/L	10	3/11/2014 3:03:59 AM
67-64-1	Acetone	ND	100		µg/L	10	3/11/2014 3:03:59 AM
108-86-1	Bromobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-27-4	Bromodichloromethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-25-2	Bromoform	ND	10		µg/L	10	3/11/2014 3:03:59 AM
74-83-9	Bromomethane	ND	30		µg/L	10	3/11/2014 3:03:59 AM
78-93-3	2-Butanone	ND	100		µg/L	10	3/11/2014 3:03:59 AM
75-15-0	Carbon disulfide	ND	100		µg/L	10	3/11/2014 3:03:59 AM
56-23-5	Carbon Tetrachloride	ND	10		µg/L	10	3/11/2014 3:03:59 AM
108-90-7	Chlorobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-00-3	Chloroethane	ND	20		µg/L	10	3/11/2014 3:03:59 AM
67-66-3	Chloroform	ND	10		µg/L	10	3/11/2014 3:03:59 AM
74-87-3	Chloromethane	ND	30		µg/L	10	3/11/2014 3:03:59 AM
95-49-8	2-Chlorotoluene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
106-43-4	4-Chlorotoluene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
156-59-2	cis-1,2-DCE	ND	10		µg/L	10	3/11/2014 3:03:59 AM
10061-01-5	cis-1,3-Dichloropropene	ND	10		µg/L	10	3/11/2014 3:03:59 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:00:00 AM
Lab ID: 1403198-009
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
96-12-8	1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	3/11/2014 3:03:59 AM
124-48-1	Dibromochloromethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
74-95-3	Dibromomethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
95-50-1	1,2-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
541-73-1	1,3-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
106-46-7	1,4-Dichlorobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-71-8	Dichlorodifluoromethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-34-3	1,1-Dichloroethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-35-4	1,1-Dichloroethene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
78-87-5	1,2-Dichloropropane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
142-28-9	1,3-Dichloropropane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
594-20-7	2,2-Dichloropropane	ND	20		µg/L	10	3/11/2014 3:03:59 AM
563-58-6	1,1-Dichloropropene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
87-68-3	Hexachlorobutadiene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
591-78-6	2-Hexanone	ND	100		µg/L	10	3/11/2014 3:03:59 AM
98-82-8	Isopropylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
99-87-6	4-Isopropyltoluene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
108-10-1	4-Methyl-2-pentanone	ND	100		µg/L	10	3/11/2014 3:03:59 AM
75-09-2	Methylene Chloride	ND	30		µg/L	10	3/11/2014 3:03:59 AM
104-51-8	n-Butylbenzene	ND	30		µg/L	10	3/11/2014 3:03:59 AM
103-65-1	n-Propylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
135-98-8	sec-Butylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
100-42-5	Styrene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
98-06-6	tert-Butylbenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
630-20-6	1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
79-34-5	1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	3/11/2014 3:03:59 AM
127-18-4	Tetrachloroethene (PCE)	ND	10		µg/L	10	3/11/2014 3:03:59 AM
156-60-5	trans-1,2-DCE	ND	10		µg/L	10	3/11/2014 3:03:59 AM
10061-02-6	trans-1,3-Dichloropropene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
87-61-6	1,2,3-Trichlorobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
120-82-1	1,2,4-Trichlorobenzene	ND	10		µg/L	10	3/11/2014 3:03:59 AM
71-55-6	1,1,1-Trichloroethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
79-00-5	1,1,2-Trichloroethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
79-01-6	Trichloroethene (TCE)	ND	10		µg/L	10	3/11/2014 3:03:59 AM
75-69-4	Trichlorofluoromethane	ND	10		µg/L	10	3/11/2014 3:03:59 AM
96-18-4	1,2,3-Trichloropropane	ND	20		µg/L	10	3/11/2014 3:03:59 AM
75-01-4	Vinyl chloride	ND	10		µg/L	10	3/11/2014 3:03:59 AM
1330-20-7	Xylenes, Total	ND	15		µg/L	10	3/11/2014 3:03:59 AM
17060-07-0	Surr: 1,2-Dichloroethane-d4	91.9	70-130		%REC	10	3/11/2014 3:03:59 AM
460-00-4	Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	10	3/11/2014 3:03:59 AM

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-12B
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 11:00:00 AM
Lab ID: 1403198-009
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
1868-53-7	Surr: Dibromofluoromethane	98.5	70-130		%REC	10	3/11/2014 3:03:59 AM
2037-26-5	Surr: Toluene-d8	90.1	70-130		%REC	10	3/11/2014 3:03:59 AM
SM2510B: SPECIFIC CONDUCTANCE							Analyst: **JML**
eC	Conductivity	7800	0.010		µmhos/c	1	3/6/2014 1:06:07 PM
SM4500-H+B: PH							Analyst: **JML**
pH	pH	7.97	1.68	H	pH units	1	3/6/2014 1:06:07 PM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: STP-1 to EP-2
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 9:40:00 AM
Lab ID: 1403198-010
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: DISSOLVED METALS							Analyst: **JLF**
7440-39-3	Barium	0.20	0.0020		mg/L	1	3/6/2014 3:26:04 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/6/2014 3:26:04 PM
7440-47-3	Chromium	0.014	0.0060		mg/L	1	3/6/2014 3:26:04 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/6/2014 3:26:04 PM
7439-89-6	Iron	0.63	0.10	*	mg/L	5	3/6/2014 3:31:55 PM
7439-96-5	Manganese	0.38	0.0020	*	mg/L	1	3/6/2014 3:26:04 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/11/2014 3:14:11 PM
7440-66-6	Zinc	0.019	0.010		mg/L	1	3/6/2014 3:26:04 PM
EPA METHOD 200.7: TOTAL METALS							Analyst: **JLF**
7440-39-3	Barium	0.18	0.0020		mg/L	1	3/10/2014 6:03:35 PM
7440-43-9	Cadmium	ND	0.0020		mg/L	1	3/10/2014 6:03:35 PM
7440-47-3	Chromium	0.014	0.0060		mg/L	1	3/12/2014 2:10:51 PM
7440-50-8	Copper	ND	0.0060		mg/L	1	3/10/2014 6:03:35 PM
7439-89-6	Iron	0.94	0.020	*	mg/L	1	3/12/2014 2:10:51 PM
7439-96-5	Manganese	0.36	0.0020	*	mg/L	1	3/10/2014 6:03:35 PM
7440-22-4	Silver	ND	0.0050		mg/L	1	3/18/2014 3:41:21 PM
7440-66-6	Zinc	0.044	0.010		mg/L	1	3/12/2014 3:51:26 PM
EPA 200.8: DISSOLVED METALS							Analyst: **DBD**
7440-38-2	Arsenic	ND	0.010		mg/L	10	3/13/2014 3:19:39 PM
7439-92-1	Lead	ND	0.010		mg/L	10	3/13/2014 3:19:39 PM
7782-49-2	Selenium	0.060	0.010	*	mg/L	10	3/13/2014 3:19:39 PM
7440-61-1	Uranium	ND	0.010		mg/L	10	3/13/2014 3:19:39 PM
200.8 ICPMS METALS:TOTAL							Analyst: **DBD**
7440-38-2	Arsenic	0.011	0.010	*	mg/L	10	3/14/2014 4:11:52 PM
7439-92-1	Lead	ND	0.0010		mg/L	1	3/12/2014 3:11:56 PM
7782-49-2	Selenium	0.027	0.010		mg/L	10	3/14/2014 4:11:52 PM
7440-61-1	Uranium	0.0040	0.0010		mg/L	1	3/12/2014 3:11:56 PM
EPA METHOD 245.1: MERCURY							Analyst: **JML**
7439-97-6	Mercury	ND	0.00020		mg/L	1	3/6/2014 5:53:12 PM
SM5210B: BOD							Analyst: **SMS**
BOD	Biochemical Oxygen Demand	560	2.0		mg/L	1	3/11/2014 11:16:00 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-Group #7-20140305
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 8:55:00 AM
Lab ID: 1403198-011
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
108-88-3	Toluene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
100-41-4	Ethylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
95-63-6	1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
108-67-8	1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
107-06-2	1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
106-93-4	1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
91-20-3	Naphthalene	ND	2.0		µg/L	1	3/11/2014 4:00:02 AM
90-12-0	1-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2014 4:00:02 AM
91-57-6	2-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2014 4:00:02 AM
67-64-1	Acetone	ND	10		µg/L	1	3/11/2014 4:00:02 AM
108-86-1	Bromobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-27-4	Bromodichloromethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-25-2	Bromoform	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
74-83-9	Bromomethane	ND	3.0		µg/L	1	3/11/2014 4:00:02 AM
78-93-3	2-Butanone	ND	10		µg/L	1	3/11/2014 4:00:02 AM
75-15-0	Carbon disulfide	ND	10		µg/L	1	3/11/2014 4:00:02 AM
56-23-5	Carbon Tetrachloride	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
108-90-7	Chlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-00-3	Chloroethane	ND	2.0		µg/L	1	3/11/2014 4:00:02 AM
67-66-3	Chloroform	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
74-87-3	Chloromethane	ND	3.0		µg/L	1	3/11/2014 4:00:02 AM
95-49-8	2-Chlorotoluene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
106-43-4	4-Chlorotoluene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
156-59-2	cis-1,2-DCE	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
10061-01-5	cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/11/2014 4:00:02 AM
124-48-1	Dibromochloromethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
74-95-3	Dibromomethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
95-50-1	1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
541-73-1	1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
106-46-7	1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-71-8	Dichlorodifluoromethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-34-3	1,1-Dichloroethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-35-4	1,1-Dichloroethene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
78-87-5	1,2-Dichloropropane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
142-28-9	1,3-Dichloropropane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
594-20-7	2,2-Dichloropropane	ND	2.0		µg/L	1	3/11/2014 4:00:02 AM
563-58-6	1,1-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: FB-Group #7-20140305
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 8:55:00 AM
Lab ID: 1403198-011
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
87-68-3	Hexachlorobutadiene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
591-78-6	2-Hexanone	ND	10		µg/L	1	3/11/2014 4:00:02 AM
98-82-8	Isopropylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
99-87-6	4-Isopropyltoluene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
108-10-1	4-Methyl-2-pentanone	ND	10		µg/L	1	3/11/2014 4:00:02 AM
75-09-2	Methylene Chloride	ND	3.0		µg/L	1	3/11/2014 4:00:02 AM
104-51-8	n-Butylbenzene	ND	3.0		µg/L	1	3/11/2014 4:00:02 AM
103-65-1	n-Propylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
135-98-8	sec-Butylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
100-42-5	Styrene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
98-06-6	tert-Butylbenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/11/2014 4:00:02 AM
127-18-4	Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
156-60-5	trans-1,2-DCE	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
10061-02-6	trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
87-61-6	1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
120-82-1	1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
71-55-6	1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
79-00-5	1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
79-01-6	Trichloroethene (TCE)	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
75-69-4	Trichlorofluoromethane	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
96-18-4	1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/11/2014 4:00:02 AM
75-01-4	Vinyl chloride	ND	1.0		µg/L	1	3/11/2014 4:00:02 AM
1330-20-7	Xylenes, Total	ND	1.5		µg/L	1	3/11/2014 4:00:02 AM
17060-07-0	Surr: 1,2-Dichloroethane-d4	90.8	70-130		%REC	1	3/11/2014 4:00:02 AM
460-00-4	Surr: 4-Bromofluorobenzene	91.2	70-130		%REC	1	3/11/2014 4:00:02 AM
1868-53-7	Surr: Dibromofluoromethane	98.2	70-130		%REC	1	3/11/2014 4:00:02 AM
2037-26-5	Surr: Toluene-d8	92.2	70-130		%REC	1	3/11/2014 4:00:02 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-#1-20140305
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 8:50:00 AM
Lab ID: 1403198-012
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
108-88-3	Toluene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
100-41-4	Ethylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
95-63-6	1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
108-67-8	1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
107-06-2	1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
106-93-4	1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
91-20-3	Naphthalene	ND	2.0		µg/L	1	3/11/2014 4:55:47 AM
90-12-0	1-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2014 4:55:47 AM
91-57-6	2-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2014 4:55:47 AM
67-64-1	Acetone	ND	10		µg/L	1	3/11/2014 4:55:47 AM
108-86-1	Bromobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-27-4	Bromodichloromethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-25-2	Bromoform	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
74-83-9	Bromomethane	ND	3.0		µg/L	1	3/11/2014 4:55:47 AM
78-93-3	2-Butanone	ND	10		µg/L	1	3/11/2014 4:55:47 AM
75-15-0	Carbon disulfide	ND	10		µg/L	1	3/11/2014 4:55:47 AM
56-23-5	Carbon Tetrachloride	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
108-90-7	Chlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-00-3	Chloroethane	ND	2.0		µg/L	1	3/11/2014 4:55:47 AM
67-66-3	Chloroform	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
74-87-3	Chloromethane	ND	3.0		µg/L	1	3/11/2014 4:55:47 AM
95-49-8	2-Chlorotoluene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
106-43-4	4-Chlorotoluene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
156-59-2	cis-1,2-DCE	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
10061-01-5	cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/11/2014 4:55:47 AM
124-48-1	Dibromochloromethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
74-95-3	Dibromomethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
95-50-1	1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
541-73-1	1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
106-46-7	1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-71-8	Dichlorodifluoromethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-34-3	1,1-Dichloroethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-35-4	1,1-Dichloroethene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
78-87-5	1,2-Dichloropropane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
142-28-9	1,3-Dichloropropane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
594-20-7	2,2-Dichloropropane	ND	2.0		µg/L	1	3/11/2014 4:55:47 AM
563-58-6	1,1-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EB-#1-20140305
Project: Q1 -2014 Groundwater Sampling
Collection Date: 3/5/2014 8:50:00 AM
Lab ID: 1403198-012
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
87-68-3	Hexachlorobutadiene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
591-78-6	2-Hexanone	ND	10		µg/L	1	3/11/2014 4:55:47 AM
98-82-8	Isopropylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
99-87-6	4-Isopropyltoluene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
108-10-1	4-Methyl-2-pentanone	ND	10		µg/L	1	3/11/2014 4:55:47 AM
75-09-2	Methylene Chloride	ND	3.0		µg/L	1	3/11/2014 4:55:47 AM
104-51-8	n-Butylbenzene	ND	3.0		µg/L	1	3/11/2014 4:55:47 AM
103-65-1	n-Propylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
135-98-8	sec-Butylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
100-42-5	Styrene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
98-06-6	tert-Butylbenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/11/2014 4:55:47 AM
127-18-4	Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
156-60-5	trans-1,2-DCE	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
10061-02-6	trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
87-61-6	1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
120-82-1	1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
71-55-6	1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
79-00-5	1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
79-01-6	Trichloroethene (TCE)	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
75-69-4	Trichlorofluoromethane	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
96-18-4	1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/11/2014 4:55:47 AM
75-01-4	Vinyl chloride	ND	1.0		µg/L	1	3/11/2014 4:55:47 AM
1330-20-7	Xylenes, Total	ND	1.5		µg/L	1	3/11/2014 4:55:47 AM
17060-07-0	Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	3/11/2014 4:55:47 AM
460-00-4	Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	1	3/11/2014 4:55:47 AM
1868-53-7	Surr: Dibromofluoromethane	98.2	70-130		%REC	1	3/11/2014 4:55:47 AM
2037-26-5	Surr: Toluene-d8	90.5	70-130		%REC	1	3/11/2014 4:55:47 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Q1 -2014 Groundwater Sampling
Collection Date:
Lab ID: 1403198-013
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
71-43-2	Benzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
108-88-3	Toluene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
100-41-4	Ethylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
95-63-6	1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
108-67-8	1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
107-06-2	1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
106-93-4	1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
91-20-3	Naphthalene	ND	2.0		µg/L	1	3/11/2014 5:51:46 AM
90-12-0	1-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2014 5:51:46 AM
91-57-6	2-Methylnaphthalene	ND	4.0		µg/L	1	3/11/2014 5:51:46 AM
67-64-1	Acetone	ND	10		µg/L	1	3/11/2014 5:51:46 AM
108-86-1	Bromobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-27-4	Bromodichloromethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-25-2	Bromoform	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
74-83-9	Bromomethane	ND	3.0		µg/L	1	3/11/2014 5:51:46 AM
78-93-3	2-Butanone	ND	10		µg/L	1	3/11/2014 5:51:46 AM
75-15-0	Carbon disulfide	ND	10		µg/L	1	3/11/2014 5:51:46 AM
56-23-5	Carbon Tetrachloride	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
108-90-7	Chlorobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-00-3	Chloroethane	ND	2.0		µg/L	1	3/11/2014 5:51:46 AM
67-66-3	Chloroform	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
74-87-3	Chloromethane	ND	3.0		µg/L	1	3/11/2014 5:51:46 AM
95-49-8	2-Chlorotoluene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
106-43-4	4-Chlorotoluene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
156-59-2	cis-1,2-DCE	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
10061-01-5	cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/11/2014 5:51:46 AM
124-48-1	Dibromochloromethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
74-95-3	Dibromomethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
95-50-1	1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
541-73-1	1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
106-46-7	1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-71-8	Dichlorodifluoromethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-34-3	1,1-Dichloroethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-35-4	1,1-Dichloroethene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
78-87-5	1,2-Dichloropropane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
142-28-9	1,3-Dichloropropane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
594-20-7	2,2-Dichloropropane	ND	2.0		µg/L	1	3/11/2014 5:51:46 AM
563-58-6	1,1-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: Trip Blank
Project: Q1 -2014 Groundwater Sampling
Collection Date:
Lab ID: 1403198-013
Matrix: AQUEOUS
Received Date: 3/5/2014 3:40:00 PM

CAS#	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES							Analyst: **KJH**
87-68-3	Hexachlorobutadiene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
591-78-6	2-Hexanone	ND	10		µg/L	1	3/11/2014 5:51:46 AM
98-82-8	Isopropylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
99-87-6	4-Isopropyltoluene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
108-10-1	4-Methyl-2-pentanone	ND	10		µg/L	1	3/11/2014 5:51:46 AM
75-09-2	Methylene Chloride	ND	3.0		µg/L	1	3/11/2014 5:51:46 AM
104-51-8	n-Butylbenzene	ND	3.0		µg/L	1	3/11/2014 5:51:46 AM
103-65-1	n-Propylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
135-98-8	sec-Butylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
100-42-5	Styrene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
98-06-6	tert-Butylbenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/11/2014 5:51:46 AM
127-18-4	Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
156-60-5	trans-1,2-DCE	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
10061-02-6	trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
87-61-6	1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
120-82-1	1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
71-55-6	1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
79-00-5	1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
79-01-6	Trichloroethene (TCE)	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
75-69-4	Trichlorofluoromethane	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
96-18-4	1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/11/2014 5:51:46 AM
75-01-4	Vinyl chloride	ND	1.0		µg/L	1	3/11/2014 5:51:46 AM
1330-20-7	Xylenes, Total	ND	1.5		µg/L	1	3/11/2014 5:51:46 AM
17060-07-0	Surr: 1,2-Dichloroethane-d4	90.0	70-130		%REC	1	3/11/2014 5:51:46 AM
460-00-4	Surr: 4-Bromofluorobenzene	91.6	70-130		%REC	1	3/11/2014 5:51:46 AM
1868-53-7	Surr: Dibromofluoromethane	97.9	70-130		%REC	1	3/11/2014 5:51:46 AM
2037-26-5	Surr: Toluene-d8	90.0	70-130		%REC	1	3/11/2014 5:51:46 AM

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

March 13, 2014

ESC Sample # : L686672-01

Site ID :

Project # :

Date Received : March 07, 2014
Description :

Sample ID : 1403198-001H EP-1

Collected By :
Collection Date : 03/05/14 09:10

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	560	10.	mg/l	410.4	03/10/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

March 13, 2014

ESC Sample # : L686672-02

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-002H EP-2

Project # :

Collected By :
Collection Date : 03/05/14 10:20

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	1000	20.	mg/l	410.4	03/11/14	2

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

March 13, 2014

ESC Sample # : L686672-03

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-003H EP-6

Project # :

Collected By :
Collection Date : 03/05/14 13:25

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	600	50.	mg/l	410.4	03/11/14	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

March 13, 2014

ESC Sample # : L686672-04

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-004H EP-7

Project # :

Collected By :
Collection Date : 03/05/14 12:35

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	3900	1000	mg/l	410.4	03/10/14	100

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

March 13, 2014

ESC Sample # : L686672-05

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-005H EP-8

Project # :

Collected By :
Collection Date : 03/05/14 12:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	2900	50.	mg/l	410.4	03/13/14	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

March 13, 2014

ESC Sample # : L686672-06

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-006H EP-9

Project # :

Collected By :
Collection Date : 03/05/14 12:55

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	3700	1000	mg/l	410.4	03/10/14	100

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
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Albuquerque, NM 87109

March 13, 2014

Date Received : March 07, 2014
Description :

ESC Sample # : L686672-07

Sample ID : 1403198-007H EP-11

Site ID :

Project # :

Collected By :
Collection Date : 03/05/14 11:50

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	570	100	mg/l	410.4	03/10/14	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
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March 13, 2014

ESC Sample # : L686672-08

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-008H EP-12A

Project # :

Collected By :
Collection Date : 03/05/14 11:25

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	560	10.	mg/l	410.4	03/10/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
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March 13, 2014

ESC Sample # : L686672-09

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-009H EP-12B

Project # :

Collected By :
Collection Date : 03/05/14 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	810	10.	mg/l	410.4	03/10/14	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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REPORT OF ANALYSIS

Anne Thorne
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March 13, 2014

ESC Sample # : L686672-10

Date Received : March 07, 2014
Description :

Site ID :

Sample ID : 1403198-010D STP-1 TO EP-2

Project # :

Collected By :
Collection Date : 03/05/14 09:40

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
COD	1500	100	mg/l	410.4	03/11/14	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/13/14 16:17 Printed: 03/13/14 16:18

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Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

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Quality Assurance Report
Level II

L686672

March 13, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
COD	< 10	mg/l			WG709939	03/10/14 14:19
COD	< 10	mg/l			WG710160	03/11/14 13:22
COD	< 10	mg/l			WG710548	03/13/14 14:38

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
COD	mg/l	3200	3200	0.0	5	L686660-01	WG709939
COD	mg/l	180000	180000	0.0	5	L686678-01	WG710160
COD	mg/l	990000	990000	0.0	5	L686678-02	WG710160
COD	mg/l	1000	1000	0.0	5	L686672-02	WG710160
COD	mg/l	1000	1000	0.0	5	L686665-01	WG710160
COD	mg/l	600.	600.	0.0	5	L686672-03	WG710160
COD	mg/l	34.0	35.0	2.90	5	L687243-01	WG710548
COD	mg/l	2900	2900	0.0	5	L686672-05	WG710548

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
COD	mg/l	183	190.	104.	90-110	WG709939
COD	mg/l	183	175.	95.6	90-110	WG710160
COD	mg/l	183	183.	100.	90-110	WG710548

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
COD	mg/l	190.	190.	104.	90-110	0.0	5	WG709939
COD	mg/l	178.	175.	97.0	90-110	1.70	5	WG710160
COD	mg/l	185.	183.	101.	90-110	1.09	5	WG710548

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
COD	mg/l	1830	1000	400	100.	90-110	L686672-02	WG710160
COD	mg/l	550.	150.	400	100.	90-110	L687091-01	WG710548

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
COD	mg/l	1820	1830	102.	90-110	0.549	5	L686672-02	WG710160

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Anne Thorne
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Quality Assurance Report
Level II

L686672

March 13, 2014

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
COD	mg/l	552.	550.	100.	90-110	0.363	5	L687091-01	WG710548

Batch number /Run number / Sample number cross reference

WG709939: R2892040: L686672-01 04 06 07 08 09
WG710160: R2892133: L686672-02 03 10
WG710548: R2893011: L686672-05

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17148**	RunNo: **17148**
Prep Date: **2/5/2014**	Analysis Date: **3/6/2014**	SeqNo: **493068** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Calcium	ND	1.0								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Manganese	ND	0.0020								
Potassium	ND	1.0								
Zinc	ND	0.010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R17148**	RunNo: **17148**
Prep Date:	Analysis Date: **3/6/2014**	SeqNo: **493069** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	102	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Calcium	50	1.0	50.00	0	99.8	85	115			
Chromium	0.50	0.0060	0.5000	0	99.3	85	115			
Copper	0.49	0.0060	0.5000	0	98.0	85	115			
Iron	0.52	0.020	0.5000	0	104	85	115			
Magnesium	50	1.0	50.00	0	99.0	85	115			
Manganese	0.51	0.0020	0.5000	0	102	85	115			
Potassium	49	1.0	50.00	0	98.0	85	115			
Zinc	0.52	0.010	0.5000	0	104	85	115			

Sample ID **1403198-010BMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **STP-1 to EP-2**	Batch ID: **R17148**	RunNo: **17148**
Prep Date:	Analysis Date: **3/6/2014**	SeqNo: **493144** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.72	0.0020	0.5000	0.1992	104	70	130			
Cadmium	0.48	0.0020	0.5000	0	96.5	70	130			
Chromium	0.51	0.0060	0.5000	0.01360	99.7	70	130			
Copper	0.43	0.0060	0.5000	0	85.6	70	130			
Manganese	0.88	0.0020	0.5000	0.3795	99.9	70	130			
Zinc	0.54	0.010	0.5000	0.01880	104	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**1403198-010BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**STP-1 to EP-2**	Batch ID:	**R17148**		RunNo:	**17148**				
Prep Date:		Analysis Date:	**3/6/2014**		SeqNo:	**493145**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.72	0.0020	0.5000	0.1992	103	70	130	0.694	20	
Cadmium	0.48	0.0020	0.5000	0	96.3	70	130	0.216	20	
Chromium	0.51	0.0060	0.5000	0.01360	99.2	70	130	0.509	20	
Copper	0.43	0.0060	0.5000	0	85.2	70	130	0.403	20	
Manganese	0.88	0.0020	0.5000	0.3795	99.9	70	130	0.0159	20	
Zinc	0.53	0.010	0.5000	0.01880	103	70	130	1.09	20	

Sample ID	**1403198-010BMS**	SampType:	**MS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**STP-1 to EP-2**	Batch ID:	**R17148**		RunNo:	**17148**				
Prep Date:		Analysis Date:	**3/6/2014**		SeqNo:	**493147**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	3.3	0.10	2.500	0.6302	107	70	130			

Sample ID	**1403198-010BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**STP-1 to EP-2**	Batch ID:	**R17148**		RunNo:	**17148**				
Prep Date:		Analysis Date:	**3/6/2014**		SeqNo:	**493148**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	3.4	0.10	2.500	0.6302	111	70	130	3.05	20	

Sample ID	**MB**	SampType:	**MBLK**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**PBW**	Batch ID:	**R17186**		RunNo:	**17186**				
Prep Date:	**2/5/2014**	Analysis Date:	**3/7/2014**		SeqNo:	**494522**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	1.0								
Silver	ND	0.0050								
Sodium	ND	1.0								

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17186**		RunNo:	**17186**				
Prep Date:		Analysis Date:	**3/7/2014**		SeqNo:	**494523**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	48	1.0	50.00	0	95.5	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Sodium	49	1.0	50.00	0	98.3	85	115			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**LCS**	SampType:	**LCS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**LCSW**	Batch ID:	**R17234**		RunNo:	**17234**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496101**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.10	0.0050	0.1000	0	101	85	115			

Sample ID	**1403198-010BMS**	SampType:	**MS**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**STP-1 to EP-2**	Batch ID:	**R17234**		RunNo:	**17234**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496167**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.095	0.0050	0.1000	0	95.0	70	130			

Sample ID	**1403198-010BMSD**	SampType:	**MSD**		TestCode:	**EPA Method 200.7: Dissolved Metals**				
Client ID:	**STP-1 to EP-2**	Batch ID:	**R17234**		RunNo:	**17234**				
Prep Date:		Analysis Date:	**3/11/2014**		SeqNo:	**496171**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.096	0.0050	0.1000	0	95.6	70	130	0.577	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **MB-12081**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW**	Batch ID: **12081**	RunNo: **17220**
Prep Date: **3/7/2014**	Analysis Date: **3/10/2014**	SeqNo: **495498** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LCS-12081**	SampType: **LCS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW**	Batch ID: **12081**	RunNo: **17220**
Prep Date: **3/7/2014**	Analysis Date: **3/10/2014**	SeqNo: **495499** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.51	0.0020	0.5000	0	101	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.51	0.0060	0.5000	0	102	85	115			
Copper	0.51	0.0060	0.5000	0	101	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	98.9	85	115			
Silver	0.11	0.0050	0.1000	0	106	85	115			
Zinc	0.52	0.010	0.5000	0	104	85	115			

Sample ID **MB-12082**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW**	Batch ID: **12082**	RunNo: **17220**
Prep Date: **3/7/2014**	Analysis Date: **3/10/2014**	SeqNo: **495500** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Silver	ND	0.0050								
Zinc	ND	0.010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **LCS-12082**	SampType: **LCS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW**	Batch ID: **12082**	RunNo: **17220**
Prep Date: **3/7/2014**	Analysis Date: **3/10/2014**	SeqNo: **495501** 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			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Copper	0.50	0.0060	0.5000	0	100	85	115			
Iron	0.50	0.020	0.5000	0	99.6	85	115			
Manganese	0.49	0.0020	0.5000	0	98.2	85	115			
Silver	0.11	0.0050	0.1000	0	105	85	115			
Zinc	0.51	0.010	0.5000	0	102	85	115			

Sample ID **1403198-005GMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **EP-8**	Batch ID: **12081**	RunNo: **17256**
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **496978** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.65	0.010	0.5000	0.1218	106	70	130			
Cadmium	0.56	0.010	0.5000	0	112	70	130			
Chromium	0.51	0.030	0.5000	0.02275	96.5	70	130			
Copper	0.52	0.030	0.5000	0	103	70	130			
Iron	0.89	0.10	0.5000	0.2802	121	70	130			
Manganese	2.8	0.010	0.5000	2.230	108	70	130			

Sample ID **1403198-005GMSD**	SampType: **MSD**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **EP-8**	Batch ID: **12081**	RunNo: **17256**
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **496979** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.60	0.010	0.5000	0.1218	95.0	70	130	8.78	20	
Cadmium	0.51	0.010	0.5000	0	103	70	130	8.46	20	
Chromium	0.46	0.030	0.5000	0.02275	86.7	70	130	10.3	20	
Copper	0.48	0.030	0.5000	0	95.8	70	130	7.60	20	
Iron	0.79	0.10	0.5000	0.2802	101	70	130	11.9	20	
Manganese	2.6	0.010	0.5000	2.230	67.5	70	130	7.50	20	S

Sample ID **1403198-006GMS**	SampType: **MS**	TestCode: **EPA Method 200.7: Total Metals**
Client ID: **EP-9**	Batch ID: **12082**	RunNo: **17256**
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **496982** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.71	0.010	0.5000	0.1793	106	70	130			
Cadmium	0.54	0.010	0.5000	0	109	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**1403198-006GMS**	SampType: **MS**			TestCode: **EPA Method 200.7: Total Metals**				
Client ID:	**EP-9**	Batch ID: **12082**			RunNo: **17256**				
Prep Date:	**3/7/2014**	Analysis Date: **3/12/2014**			SeqNo: **496982**	Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.030	0.5000	0.01995	96.4	70	130			
Copper	0.54	0.030	0.5000	0	108	70	130			
Iron	0.82	0.10	0.5000	0.2555	113	70	130			

Sample ID	**1403198-006GMSD**	SampType: **MSD**			TestCode: **EPA Method 200.7: Total Metals**				
Client ID:	**EP-9**	Batch ID: **12082**			RunNo: **17256**				
Prep Date:	**3/7/2014**	Analysis Date: **3/12/2014**			SeqNo: **496983**	Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.70	0.010	0.5000	0.1793	105	70	130	0.766	20	
Cadmium	0.54	0.010	0.5000	0	108	70	130	0.990	20	
Chromium	0.50	0.030	0.5000	0.01995	95.7	70	130	0.700	20	
Copper	0.54	0.030	0.5000	0	107	70	130	0.928	20	
Iron	0.82	0.10	0.5000	0.2555	114	70	130	0.225	20	

Sample ID	**1403198-005GMS**	SampType: **MS**			TestCode: **EPA Method 200.7: Total Metals**				
Client ID:	**EP-8**	Batch ID: **12081**			RunNo: **17256**				
Prep Date:	**3/7/2014**	Analysis Date: **3/12/2014**			SeqNo: **497043**	Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.54	0.050	0.5000	0.03110	103	70	130			

Sample ID	**1403198-005GMSD**	SampType: **MSD**			TestCode: **EPA Method 200.7: Total Metals**				
Client ID:	**EP-8**	Batch ID: **12081**			RunNo: **17256**				
Prep Date:	**3/7/2014**	Analysis Date: **3/12/2014**			SeqNo: **497044**	Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.51	0.050	0.5000	0.03110	95.7	70	130	6.64	20	

Sample ID	**1403198-006GMS**	SampType: **MS**			TestCode: **EPA Method 200.7: Total Metals**				
Client ID:	**EP-9**	Batch ID: **12082**			RunNo: **17256**				
Prep Date:	**3/7/2014**	Analysis Date: **3/12/2014**			SeqNo: **497046**	Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.51	0.050	0.5000	0.02245	96.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**1403198-006GMSD**	SampType: **MSD**			TestCode: **EPA Method 200.7: Total Metals**					
Client ID:	**EP-9**	Batch ID: **12082**			RunNo: **17256**					
Prep Date:	**3/7/2014**	Analysis Date: **3/12/2014**			SeqNo: **497047**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.50	0.050	0.5000	0.02245	96.0	70	130	0.754	20	

Sample ID	**1403198-005GMS**	SampType: **MS**			TestCode: **EPA Method 200.7: Total Metals**					
Client ID:	**EP-8**	Batch ID: **12081**			RunNo: **17408**					
Prep Date:	**3/7/2014**	Analysis Date: **3/18/2014**			SeqNo: **501377**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.13	0.025	0.1000	0	127	70	130			

Sample ID	**1403198-005GMSD**	SampType: **MSD**			TestCode: **EPA Method 200.7: Total Metals**					
Client ID:	**EP-8**	Batch ID: **12081**			RunNo: **17408**					
Prep Date:	**3/7/2014**	Analysis Date: **3/18/2014**			SeqNo: **501378**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.12	0.025	0.1000	0	122	70	130	4.00	20	

Sample ID	**1403198-006GMS**	SampType: **MS**			TestCode: **EPA Method 200.7: Total Metals**					
Client ID:	**EP-9**	Batch ID: **12082**			RunNo: **17408**					
Prep Date:	**3/7/2014**	Analysis Date: **3/18/2014**			SeqNo: **501384**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.12	0.025	0.1000	0	125	70	130			

Sample ID	**1403198-006GMSD**	SampType: **MSD**			TestCode: **EPA Method 200.7: Total Metals**					
Client ID:	**EP-9**	Batch ID: **12082**			RunNo: **17408**					
Prep Date:	**3/7/2014**	Analysis Date: **3/18/2014**			SeqNo: **501392**		Units: **mg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Silver	0.12	0.025	0.1000	0	120	70	130	4.04	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R17281**	RunNo: **17281**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **497670** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	98.5	85	115			
Lead	0.025	0.0010	0.02500	0	98.0	85	115			
Selenium	0.024	0.0010	0.02500	0	96.2	85	115			
Uranium	0.025	0.0010	0.02500	0	98.4	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17281**	RunNo: **17281**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **497671** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R17281**	RunNo: **17281**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498009** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.1	85	115			
Lead	0.025	0.0010	0.02500	0	98.1	85	115			
Selenium	0.024	0.0010	0.02500	0	94.7	85	115			
Uranium	0.024	0.0010	0.02500	0	96.4	85	115			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R17281**	RunNo: **17281**
Prep Date:	Analysis Date: **3/13/2014**	SeqNo: **498010** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**LLLCS-12081**	SampType:	**LCSLL**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**BatchQC**	Batch ID:	**12081**		RunNo:	**17259**				
Prep Date:	**3/7/2014**	Analysis Date:	**3/12/2014**		SeqNo:	**497153**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.7	85	115			
Lead	0.024	0.0010	0.02500	0	97.1	85	115			
Selenium	0.023	0.0010	0.02500	0	92.3	85	115			
Uranium	0.025	0.0010	0.02500	0	99.5	85	115			

Sample ID	**LLLCS-12082**	SampType:	**LCSLL**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**BatchQC**	Batch ID:	**12082**		RunNo:	**17259**				
Prep Date:	**3/7/2014**	Analysis Date:	**3/12/2014**		SeqNo:	**497154**	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	85	115			B
Uranium	0.024	0.0010	0.02500	0	97.5	85	115			B

Sample ID	**LLLCS-12082**	SampType:	**LCSLL**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**BatchQC**	Batch ID:	**12082**		RunNo:	**17259**				
Prep Date:	**3/7/2014**	Analysis Date:	**3/12/2014**		SeqNo:	**497155**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	94.3	85	115			
Selenium	0.022	0.0010	0.02500	0	89.1	85	115			

Sample ID	**MB-12081**	SampType:	**MBLK**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**PBW**	Batch ID:	**12081**		RunNo:	**17259**				
Prep Date:	**3/7/2014**	Analysis Date:	**3/12/2014**		SeqNo:	**497157**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.0010								

Sample ID	**MB-12082**	SampType:	**MBLK**		TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**PBW**	Batch ID:	**12082**		RunNo:	**17259**				
Prep Date:	**3/7/2014**	Analysis Date:	**3/12/2014**		SeqNo:	**497158**	Units:	**mg/L**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.0010								
Uranium	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**MB-12082**	SampType:	**MBLK**	TestCode:	**200.8 ICPMS Metals:Total**				
Client ID:	**PBW**	Batch ID:	**12082**	RunNo:	**17259**				
Prep Date:	**3/7/2014**	Analysis Date:	**3/12/2014**	SeqNo:	**497159**	Units:	**mg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**MB-12063**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**PBW**	Batch ID:	**12063**	RunNo:	**17150**					
Prep Date:	**3/6/2014**	Analysis Date:	**3/6/2014**	SeqNo:	**493661**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-12063**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**LCSW**	Batch ID:	**12063**	RunNo:	**17150**					
Prep Date:	**3/6/2014**	Analysis Date:	**3/6/2014**	SeqNo:	**493664**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.00020	0.005000	0	102	80	120			

Sample ID	**1403198-002GMS**	SampType:	**MS**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**EP-2**	Batch ID:	**12063**	RunNo:	**17150**					
Prep Date:	**3/6/2014**	Analysis Date:	**3/6/2014**	SeqNo:	**493681**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0051	0.0010	0.005000	0	103	75	125			

Sample ID	**1403198-002GMSD**	SampType:	**MSD**	TestCode:	**EPA Method 245.1: Mercury**					
Client ID:	**EP-2**	Batch ID:	**12063**	RunNo:	**17150**					
Prep Date:	**3/6/2014**	Analysis Date:	**3/6/2014**	SeqNo:	**493682**	Units:	**mg/L**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0052	0.0010	0.005000	0	103	75	125	0.550	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**
24-Mar-14

Client: Western Refining Southwest, Gallup
Project: Q1 -2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R17165**	RunNo: **17165**
Prep Date:	Analysis Date: **3/6/2014**	SeqNo: **493874** 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								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R17165**	RunNo: **17165**
Prep Date:	Analysis Date: **3/6/2014**	SeqNo: **493875** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	101	90	110			
Chloride	4.6	0.50	5.000	0	91.4	90	110			
Nitrogen, Nitrite (As N)	0.94	0.10	1.000	0	94.5	90	110			
Bromide	2.4	0.10	2.500	0	96.3	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	96.6	90	110			
Phosphorus, Orthophosphate (As P	4.6	0.50	5.000	0	92.8	90	110			
Sulfate	9.2	0.50	10.00	0	92.1	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496579** 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-b**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496581** 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	93.6	90	110			
Sulfate	9.5	0.50	10.00	0	94.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496606** 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: **R17244**	RunNo: **17244**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **496607** 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			
Sulfate	9.5	0.50	10.00	0	95.5	90	110			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **5ml-rb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17223**	RunNo: **17223**
Prep Date:	Analysis Date: **3/10/2014**	SeqNo: **495688** 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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **5ml-rb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R17223**	RunNo: **17223**
Prep Date:	Analysis Date: **3/10/2014**	SeqNo: **495688** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	9.1		10.00		90.7	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		86.7	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.6	70	130			
Surr: Toluene-d8	9.3		10.00		92.8	70	130			

Sample ID **lcs2**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R17223**	RunNo: **17223**
Prep Date:	Analysis Date: **3/11/2014**	SeqNo: **495690** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	121	70	130			
Toluene	21	1.0	20.00	0	106	80	120			
Chlorobenzene	20	1.0	20.00	0	102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID	**lcs2**	SampType:	**LCS**	TestCode:	**EPA Method 8260B: VOLATILES**
Client ID:	**LCSW**	Batch ID:	**R17223**	RunNo:	**17223**
Prep Date:		Analysis Date:	**3/11/2014**	SeqNo:	**495690** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	117	90	143			
Trichloroethene (TCE)	23	1.0	20.00	0	115	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.6	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130			
Surr: Toluene-d8	9.0		10.00		89.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**
24-Mar-14

Client: Western Refining Southwest, Gallup
Project: Q1 -2014 Groundwater Sampling

Sample ID **MB-12139**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**	
Client ID: **PBW**	Batch ID: **12139**	RunNo: **17268**	
Prep Date: **3/12/2014**	Analysis Date: **3/12/2014**	SeqNo: **497414**	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								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **MB-12139**	SampType: **MBLK**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **PBW**	Batch ID: **12139**	RunNo: **17268**
Prep Date: **3/12/2014**	Analysis Date: **3/12/2014**	SeqNo: **497414** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	ND	10								
2,6-Dinitrotoluene	ND	10								
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-Fluorophenol	140		200.0		70.8	22.7	98			
Surr: Phenol-d5	100		200.0		50.6	23.4	74.9			
Surr: 2,4,6-Tribromophenol	210		200.0		104	23.3	111			
Surr: Nitrobenzene-d5	95		100.0		95.2	36.8	111			
Surr: 2-Fluorobiphenyl	87		100.0		87.3	38.3	110			
Surr: 4-Terphenyl-d14	92		100.0		91.7	52.1	116			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **LCS-12139**	SampType: **LCS**	TestCode: **EPA Method 8270C: Semivolatiles**
Client ID: **LCSW**	Batch ID: **12139**	RunNo: **17268**
Prep Date: **3/12/2014**	Analysis Date: **3/12/2014**	SeqNo: **497415** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	88	10	100.0	0	88.4	48	101			
4-Chloro-3-methylphenol	160	10	200.0	0	82.4	47.9	109			
2-Chlorophenol	170	10	200.0	0	85.9	40	105			
1,4-Dichlorobenzene	99	10	100.0	0	98.8	40.8	94.3			S
2,4-Dinitrotoluene	78	10	100.0	0	77.8	28.3	131			
N-Nitrosodi-n-propylamine	110	10	100.0	0	107	46.2	119			
4-Nitrophenol	93	10	200.0	0	46.6	10.5	67.9			
Pentachlorophenol	130	20	200.0	0	65.3	22.4	81.1			
Phenol	110	10	200.0	0	54.4	21.4	72.9			
Pyrene	78	10	100.0	0	77.8	46.9	109			
1,2,4-Trichlorobenzene	83	10	100.0	0	83.0	43.1	98.4			
Surr: 2-Fluorophenol	140		200.0		71.0	22.7	98			
Surr: Phenol-d5	100		200.0		52.4	23.4	74.9			
Surr: 2,4,6-Tribromophenol	210		200.0		105	23.3	111			
Surr: Nitrobenzene-d5	92		100.0		91.9	36.8	111			
Surr: 2-Fluorobiphenyl	88		100.0		87.7	38.3	110			
Surr: 4-Terphenyl-d14	98		100.0		98.4	52.1	116			

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **MB-12054**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **12054**	RunNo: **17265**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497309**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **MB--12054**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **12054**	RunNo: **17265**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497310**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **LCS-12054**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **12054**	RunNo: **17265**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497311**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	117	84.6	115.4			S

Sample ID **LCSD-12054**	SampType: **LCSD**	TestCode: **SM5210B: BOD**							
Client ID: **LCSS02**	Batch ID: **12054**	RunNo: **17265**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497312**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	220	2.0	198.0	0	113	84.6	115.4	3.50	21	

Sample ID **MB-12055**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **12055**	RunNo: **17269**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497439**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **MB--12055**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **12055**	RunNo: **17269**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497440**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**

24-Mar-14

Client: Western Refining Southwest, Gallup

Project: Q1 -2014 Groundwater Sampling

Sample ID **LCS-12055**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **12055**	RunNo: **17269**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497441**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	220	2.0	198.0	0	112	84.6	115.4			

Sample ID **LCSD-12055**	SampType: **LCSD**	TestCode: **SM5210B: BOD**							
Client ID: **LCSS02**	Batch ID: **12055**	RunNo: **17269**							
Prep Date: **3/6/2014**	Analysis Date: **3/11/2014**	SeqNo: **497442**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	210	2.0	198.0	0	107	84.6	115.4	4.61	21	

Sample ID **MB-12083**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **12083**	RunNo: **17292**							
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **498191**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **MB--12083**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **12083**	RunNo: **17292**							
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **498192**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **LCS-12083**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **12083**	RunNo: **17292**							
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **498193**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	114	84.6	115.4			

Sample ID **LCSD-12083**	SampType: **LCSD**	TestCode: **SM5210B: BOD**							
Client ID: **LCSS02**	Batch ID: **12083**	RunNo: **17292**							
Prep Date: **3/7/2014**	Analysis Date: **3/12/2014**	SeqNo: **498194**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	230	2.0	198.0	0	114	84.6	115.4	0.222	21	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**
24-Mar-14

Client: Western Refining Southwest, Gallup
Project: Q1 -2014 Groundwater Sampling

Sample ID **MB-12046**	SampType: **MBLK**		TestCode: **SM 9223B Fecal Indicator: E. coli MPN**		
Client ID: **PBW**	Batch ID: **12046**		RunNo: **17205**		
Prep Date: **3/5/2014**	Analysis Date: **3/6/2014**		SeqNo: **495088**	Units: **CFU/100ml**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
E. Coli	<1	1.000								

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**
24-Mar-14

Client: Western Refining Southwest, Gallup
Project: Q1 -2014 Groundwater Sampling

Sample ID	**1403198-002e dup**	SampType: **dup**	TestCode: **SM2510B: Specific Conductance**		
Client ID:	**EP-2**	Batch ID: **R17167**	RunNo: **17167**		
Prep Date:		Analysis Date: **3/6/2014**	SeqNo: **493946**	Units: **µmhos/cm**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Conductivity	7600	0.010						0.290	20	

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1403198**
24-Mar-14

Client: Western Refining Southwest, Gallup
Project: Q1 -2014 Groundwater Sampling

Sample ID **1403198-002e dup**	SampType: **dup**		TestCode: **SM4500-H+B: pH**		
Client ID: **EP-2**	Batch ID: **R17167**		RunNo: **17167**		
Prep Date:	Analysis Date: **3/6/2014**		SeqNo: **493976**	Units: **pH units**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH	7.87	1.68								H

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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Western Refining Gallup** Work Order Number: **1403198** RcptNo: **1**

Received by/date: LM 03/05/14

Logged By: **Anne Thorne** 3/5/2014 3:40:00 PM Anne Thorne

Completed By: **Anne Thorne** 3/5/2014 Anne Thorne

Reviewed By: JB/mg 03/06/14

Chain of Custody

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

Log In

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

FOR METALS ANALYSIS: ADDED 1mL HNO3 PER 0026, -0028 - OOC FOR ACCEPTABLE pH. HELD IN LOGIN FOR 24 HOURS AFTER PRESERVATION 03/06/14 @ 1115

# of preserved bottles checked for pH: 39 (<2 or >12 unless noted)

Adjusted? YES

Checked by:

Special Handling (if applicable)

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

Person Notified: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: Western Refining

Mailing Address: Rt 3 Box 7, Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-722-0210

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

Accreditation: ☐ NELAP ☐ Other ☐ EDD (Type) Trihydro format

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: Q1-2014 Groundwater Sampling

Project #: Quarterly Sampling

Project Manager: Cheryl Johnson

Sampler: Tom Heenes | Pak Sanders

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

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. 1403198	8270 / Phenols	WQCC Metals (Total and Dissolved)	BOD/COD	[illegible]	[illegible]	[illegible]	[illegible]	Air Bubbles (Y or N)
3/5/14			~~BW to EP-2~~								~~x~~	~~x~~ HW		
3/5/14	0910	H_2O	EP-1	12	HCl, H_2SO_4, HNO_3, TUN	-001	x	x	x	x	x	x	x	x		
3/5/14	10:20	H_2O	EP-2	11	" "	-002	x	x	x	x	x	x	x	x		
			~~EP-3~~				~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~ HW		
			~~EP-4~~				~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~ HW		
			~~EP-5~~				~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~	~~x~~ HW		
3/5/14	13:25	H_2O	EP-6	11	" "	-003	x	x	x	x	x	x	x	x		
3/5/14	12:35	H_2O	EP-7	11	" "	-004	x	x	x	x	x	x	x	x		
3/5/14	12:15	H_2O	EP-8	11	" "	-005	x	x	x	x	x	x	x	x		
3/5/14	12:55	H_2O	EP-9	11	" "	-006	x	x	x	x	x	x	x	x		
3/5/14	11:50	H_2O	EP-11	11	" "	-007	x	x	x	x	x	x	x	x		
3/5/14	11:25	H_2O	EP-12A	11	" "	-008	x	x	x	x	x	x	x	x		
3/5/14	1100	H_2O	EP-12B	11	" "	-009	x	x	x	x	x	x	x	x		
3/5/14	0940	H_2O	STP-1 to EP-2	11	HCl, H_2SO_4, HNO_3, TUN	-010			x	x				x		
3/5/14	0855	H_2O	FB-Group#7-20140305	3	HCl	-011	x									

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/5/14	1346			3-5-14	1346
3-5-14	340			03/05/14	1540

Remarks:

Page 1 of 2

- TDS on separate COC
- 1 extra bottle for 8270 + Phenols for internal QC

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

Mailing Address: Rt 3 Box 7
Gallup, NM 87301

Phone #: 505-722-3833

email or Fax#: 505-722-0210

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type) Trihydro format

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Q1-2014 Groundwater Sampling

Project #: Quarterly Sampling

Project Manager: Cheryl Johnson

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

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. 1403198	8260B + MTBE	8015B (DRO/GRO)	WQCC Metals (Total and Dissolved)	8270 + Phenols	BOD and COD	Nitrates	Cyanide	Air Bubbles (Y or N)
3/5/14	0850	H_2O	EB-#1-20140305	3	HCl	-012	X							
Lab		H_2O	TB	12	HCl	-013	X							

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/5/14	1326	Tony Walsh		3-5-14	1326
3-5-14	340			03/05/14	1540

Remarks:
Page 2 of 2
* 1 TB per cooler

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

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

March 25, 2014

Cheryl Johnson
Western Refining Southwest, Gallup
92 Giant Crossing Road
Gallup, NM 87301
TEL: (505) 722-0231
FAX (505) 722-0210

RE: Q1-2014 Groundwater Sampling OrderNo.: 1403217

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/6/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Case Narrative

WO#: **1403217**
Date: **3/25/2014**

CLIENT: Western Refining Southwest, Gallup
Project: Q1-2014 Groundwater Sampling

Method 8270:
Sample #1403217-001 was extracted and analyzed with poor phenol surrogate recoveries. The sample was re-extracted and reanalyzed outside of the 7 day holding time period. Surrogate recoveries were acceptable in the re-extraction. The hit for phenol was higher in the re-extraction (716ug) versus the original analysis (260ug).

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/5/2014 2:25:00 PM
Lab ID: 1403217-001
Matrix: AQUEOUS
Received Date: 3/6/2014 9:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Fluoride	12	1.0	*	mg/L	10	3/7/2014 1:52:45 AM	R17173
Chloride	5200	250		mg/L	500	3/12/2014 2:57:28 AM	R17244
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	3/7/2014 1:52:45 AM	R17173
Bromide	2.8	1.0		mg/L	10	3/7/2014 1:52:45 AM	R17173
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	3/7/2014 1:52:45 AM	R17173
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	3/7/2014 1:52:45 AM	R17173
Sulfate	740	50		mg/L	100	3/7/2014 2:05:09 AM	R17173
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JLF**	
Barium	0.10	0.010		mg/L	5	3/6/2014 3:54:07 PM	R17148
Cadmium	ND	0.010		mg/L	5	3/6/2014 3:54:07 PM	R17148
Calcium	350	50		mg/L	50	3/6/2014 4:00:17 PM	R17148
Chromium	ND	0.030		mg/L	5	3/6/2014 3:54:07 PM	R17148
Copper	ND	0.030		mg/L	5	3/6/2014 3:54:07 PM	R17148
Iron	0.46	0.10	*	mg/L	5	3/6/2014 3:54:07 PM	R17148
Magnesium	99	5.0		mg/L	5	3/6/2014 3:54:07 PM	R17148
Manganese	0.55	0.010	*	mg/L	5	3/6/2014 3:54:07 PM	R17148
Potassium	180	5.0		mg/L	5	3/6/2014 3:54:07 PM	R17148
Silver	ND	0.025		mg/L	5	3/11/2014 2:58:21 PM	R17234
Sodium	3300	50		mg/L	50	3/7/2014 3:47:34 PM	R17186
Zinc	ND	0.050		mg/L	5	3/6/2014 3:54:07 PM	R17148
EPA METHOD 200.7: TOTAL METALS						Analyst: **JLF**	
Barium	0.12	0.010		mg/L	5	3/12/2014 2:12:39 PM	12082
Cadmium	ND	0.010		mg/L	5	3/12/2014 2:12:39 PM	12082
Chromium	ND	0.030		mg/L	5	3/12/2014 2:12:39 PM	12082
Copper	ND	0.030		mg/L	5	3/12/2014 2:12:39 PM	12082
Iron	0.60	0.10	*	mg/L	5	3/12/2014 2:12:39 PM	12082
Manganese	0.55	0.010	*	mg/L	5	3/12/2014 2:12:39 PM	12082
Silver	ND	0.025		mg/L	5	3/12/2014 2:12:39 PM	12082
Zinc	ND	0.050		mg/L	5	3/12/2014 3:52:42 PM	12082
EPA 200.8: DISSOLVED METALS						Analyst: **DBD**	
Arsenic	0.012	0.010	*	mg/L	10	3/13/2014 3:27:59 PM	R17281
Lead	ND	0.010		mg/L	10	3/13/2014 3:27:59 PM	R17281
Selenium	0.021	0.010		mg/L	10	3/13/2014 3:27:59 PM	R17281
Uranium	ND	0.010		mg/L	10	3/13/2014 3:27:59 PM	R17281
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Arsenic	0.015	0.010	*	mg/L	10	3/14/2014 4:15:18 PM	12082
Lead	ND	0.010		mg/L	10	3/14/2014 4:15:18 PM	12082

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S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup
Client Sample ID: EP-5
Project: Q1-2014 Groundwater Sampling
Collection Date: 3/5/2014 2:25:00 PM
Lab ID: 1403217-001
Matrix: AQUEOUS
Received Date: 3/6/2014 9:12:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
200.8 ICPMS METALS:TOTAL						Analyst: **DBD**	
Selenium	0.016	0.010		mg/L	10	3/14/2014 4:15:18 PM	12082
Uranium	ND	0.010		mg/L	10	3/14/2014 4:15:18 PM	12082
EPA METHOD 245.1: MERCURY						Analyst: **JML**	
Mercury	ND	0.00020		mg/L	1	3/11/2014 12:14:43 PM	12102
SM5210B: BOD						Analyst: **SMS**	
Biochemical Oxygen Demand	>69.15	2.0	E	mg/L	1	3/12/2014 3:12:00 PM	12083
SM 9223B FECAL INDICATOR: E. COLI MPN						Analyst: **ECH**	
E. Coli	<1	1.000	H	CFU/100ml	1	3/7/2014 2:40:00 PM	12058
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Acenaphthene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Acenaphthylene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Aniline	23	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Anthracene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Azobenzene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Benz(a)anthracene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Benzo(a)pyrene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Benzo(b)fluoranthene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Benzo(g,h,i)perylene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Benzo(k)fluoranthene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Benzoic acid	ND	20		µg/L	1	3/12/2014 8:15:50 PM	12139
Benzyl alcohol	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Bis(2-chloroethyl)ether	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4-Bromophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Butyl benzyl phthalate	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Carbazole	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4-Chloro-3-methylphenol	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4-Chloroaniline	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2-Chloronaphthalene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2-Chlorophenol	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Chrysene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Di-n-butyl phthalate	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Di-n-octyl phthalate	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Dibenz(a,h)anthracene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139

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EPA METHOD 8270C: SEMIVOLATILES						Analyst: **DAM**	
Dibenzofuran	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
1,2-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
1,3-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
1,4-Dichlorobenzene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
3,3'-Dichlorobenzidine	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Diethyl phthalate	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Dimethyl phthalate	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2,4-Dichlorophenol	ND	20		µg/L	1	3/12/2014 8:15:50 PM	12139
2,4-Dimethylphenol	18	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4,6-Dinitro-2-methylphenol	ND	20		µg/L	1	3/12/2014 8:15:50 PM	12139
2,4-Dinitrophenol	ND	20		µg/L	1	3/12/2014 8:15:50 PM	12139
2,4-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2,6-Dinitrotoluene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Fluoranthene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Fluorene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Hexachlorobenzene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Hexachlorobutadiene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Hexachlorocyclopentadiene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Hexachloroethane	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Isophorone	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
1-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2-Methylnaphthalene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2-Methylphenol	82	10		µg/L	1	3/12/2014 8:15:50 PM	12139
3+4-Methylphenol	200	20		µg/L	2	3/13/2014 1:49:11 PM	12139
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
N-Nitrosodimethylamine	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
N-Nitrosodiphenylamine	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Naphthalene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2-Nitroaniline	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
3-Nitroaniline	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4-Nitroaniline	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Nitrobenzene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
2-Nitrophenol	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
4-Nitrophenol	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Pentachlorophenol	ND	20		µg/L	1	3/12/2014 8:15:50 PM	12139
Phenanthrene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139
Phenol	260	20		µg/L	2	3/13/2014 1:49:11 PM	12139
Pyrene	ND	10		µg/L	1	3/12/2014 8:15:50 PM	12139

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