

AP - 111

**ANNUAL GW
MONITORING REPORT
(8 of 29)**

2016

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603229

05-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R32660			RunNo: 32660					
Prep Date:	Analysis Date: 3/8/2016			SeqNo: 999255			Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.6	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Qualifiers:

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

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



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: **1603229**

RcptNo: **1**

Received by/date:

Logged By: **Ashley Gallegos**

03/03/16
3/3/2016 4:36:00 PM

Completed By: **Ashley Gallegos**

3/3/2016 6:11:11 PM

Reviewed By:

mg
03/04/16

Chain of Custody

1. Custody seals intact on sample bottles?
2. Is Chain of Custody complete?
3. How was the sample delivered?

Yes ☐

No ☐

Not Present ☒

Yes ☒

No ☐

Not Present ☐

Courier

Log In

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

Yes ☒

No ☐

NA ☐

Yes ☒

No ☐

NA ☐

Yes ☒

No ☐

Yes ☒

No ☐

Yes ☒

No ☐

Yes ☐

No ☒

NA ☐

Yes ☒

No ☐

No VOA Vials ☐

Yes ☐

No ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Yes ☒

No ☐

Adjusted? **NO**

Yes ☒

No ☐

Yes ☒

No ☐

Yes ☒

No ☐

Checked by: **AR**

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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

Chain-of-Custody Record

Client: WESTERN REFINING SW, INC.
 Address: ALUP REFINERY
2 GIANT CROSSING ROAD
ALUP, NM 87301
 Phone #: 505-722-0231
 Mail or Fax#: CHERYL JOHNSON
@ WNR.COM
 QC Package: ☒ Standard ☐ Other
 Standard: Level 4 (Full Validation)
 Accreditation: EXCEL
 NELAP: ☐ Other: ☐

Turn-Around Time: ☒ Standard ☐ Rush
 Project Name: QUARTERLY GW SAMPLING
 Project #: 10032391
 Project Manager: CHERYL JOHNSON
 Sampler: TRACY PAYNE
 On Ice: ☒ Yes ☐ No
 Sample Temperature: 10



HALL ENVIRONMENTAL
ANALYSIS LABORATORY

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.
1/6	0940	WATER	KA-3	20 mL VOA-G	HCL	-001
1				250 mL AMBER-1	NEAT	
1				125 mL PLASTIC-1	H2SO4	
1				125 mL PLASTIC-1	HNO3	
1				500 mL PLASTIC-1	NEAT	
3/16	1140	WATER	OW-10	40 mL VOA-G	HCL	-002
1				250 mL AMBER-1	NEAT	
1				125 mL PLASTIC-1	H2SO4	
1				125 mL PLASTIC-1	HNO3	
1				500 mL PLASTIC-1	NEAT	
1				500 mL PLASTIC-1	NEAT	

Relinquished by: [Signature] Date: 3/16 Time: 2:39
 Relinquished by: [Signature] Date: 03/03/10 Time: 1330

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



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

April 07, 2016

Cheryl Johnson

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

RE: Quarterly GW Sampling

OrderNo.: 1603424

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/8/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: RW-5

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 9:10:00 AM

Lab ID: 1603424-001

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	3.4	0.69	1.0		mg/L	1	3/10/2016 10:13:31 AM	24183
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/10/2016 10:13:31 AM	24183
Surr: DNOP	88.0	0	70-141		%Rec	1	3/10/2016 10:13:31 AM	24183
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	5.5	0.13	0.25		mg/L	5	3/9/2016 3:10:52 PM	A32685
Surr: BFB	117	0	49.5-130		%Rec	5	3/9/2016 3:10:52 PM	A32685
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	390	0.48	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Toluene	2.4	0.45	5.0	J	µg/L	5	3/14/2016 4:30:29 PM	R32780
Ethylbenzene	150	0.56	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Methyl tert-butyl ether (MTBE)	2.6	1.1	5.0	J	µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2,4-Trimethylbenzene	41	0.52	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,3,5-Trimethylbenzene	13	0.58	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2-Dichloroethane (EDC)	ND	0.26	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2-Dibromoethane (EDB)	ND	0.56	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Naphthalene	120	0.42	10		µg/L	5	3/14/2016 4:30:29 PM	R32780
1-Methylnaphthalene	110	1.0	20		µg/L	5	3/14/2016 4:30:29 PM	R32780
2-Methylnaphthalene	120	0.79	20		µg/L	5	3/14/2016 4:30:29 PM	R32780
Acetone	ND	4.4	50		µg/L	5	3/14/2016 4:30:29 PM	R32780
Bromobenzene	ND	0.40	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Bromodichloromethane	ND	0.49	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Bromoform	ND	0.51	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Bromomethane	ND	3.9	15		µg/L	5	3/14/2016 4:30:29 PM	R32780
2-Butanone	ND	1.6	50		µg/L	5	3/14/2016 4:30:29 PM	R32780
Carbon disulfide	ND	3.0	50		µg/L	5	3/14/2016 4:30:29 PM	R32780
Carbon Tetrachloride	ND	0.54	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Chlorobenzene	ND	0.52	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Chloroethane	ND	0.73	10		µg/L	5	3/14/2016 4:30:29 PM	R32780
Chloroform	ND	0.44	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Chloromethane	ND	1.1	15		µg/L	5	3/14/2016 4:30:29 PM	R32780
2-Chlorotoluene	ND	2.0	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
4-Chlorotoluene	ND	0.64	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
cis-1,2-DCE	ND	0.62	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
cis-1,3-Dichloropropene	ND	0.50	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2-Dibromo-3-chloropropane	ND	0.77	10		µg/L	5	3/14/2016 4:30:29 PM	R32780
Dibromochloromethane	ND	0.43	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Dibromomethane	ND	0.60	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2-Dichlorobenzene	ND	2.0	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: RW-5

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 9:10:00 AM

Lab ID: 1603424-001

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,3-Dichlorobenzene	ND	0.72	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,4-Dichlorobenzene	ND	0.71	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Dichlorodifluoromethane	ND	1.6	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1-Dichloroethane	ND	0.54	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1-Dichloroethene	ND	0.38	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2-Dichloropropane	ND	0.24	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,3-Dichloropropane	ND	0.78	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
2,2-Dichloropropane	ND	0.60	10		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1-Dichloropropene	ND	0.67	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Hexachlorobutadiene	ND	0.99	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
2-Hexanone	ND	1.8	50		µg/L	5	3/14/2016 4:30:29 PM	R32780
Isopropylbenzene	12	0.49	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
4-Isopropyltoluene	4.8	0.70	5.0	J	µg/L	5	3/14/2016 4:30:29 PM	R32780
4-Methyl-2-pentanone	ND	0.75	50		µg/L	5	3/14/2016 4:30:29 PM	R32780
Methylene Chloride	ND	0.31	15		µg/L	5	3/14/2016 4:30:29 PM	R32780
n-Butylbenzene	14	0.80	15	J	µg/L	5	3/14/2016 4:30:29 PM	R32780
n-Propylbenzene	32	0.66	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
sec-Butylbenzene	10	0.54	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Styrene	ND	0.48	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
tert-Butylbenzene	ND	0.48	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1,1,2-Tetrachloroethane	ND	0.56	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1,2,2-Tetrachloroethane	ND	0.53	10		µg/L	5	3/14/2016 4:30:29 PM	R32780
Tetrachloroethene (PCE)	ND	0.76	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
trans-1,2-DCE	ND	2.0	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
trans-1,3-Dichloropropene	ND	0.42	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2,3-Trichlorobenzene	ND	0.56	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2,4-Trichlorobenzene	ND	0.66	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1,1-Trichloroethane	ND	0.32	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,1,2-Trichloroethane	ND	0.38	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Trichloroethene (TCE)	ND	0.88	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Trichlorofluoromethane	ND	0.44	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
1,2,3-Trichloropropane	ND	0.56	10		µg/L	5	3/14/2016 4:30:29 PM	R32780
Vinyl chloride	ND	0.32	5.0		µg/L	5	3/14/2016 4:30:29 PM	R32780
Xylenes, Total	86	1.6	7.5		µg/L	5	3/14/2016 4:30:29 PM	R32780
Surr: 1,2-Dichloroethane-d4	89.5	0	70-130		%Rec	5	3/14/2016 4:30:29 PM	R32780
Surr: 4-Bromofluorobenzene	88.6	0	70-130		%Rec	5	3/14/2016 4:30:29 PM	R32780
Surr: Dibromofluoromethane	95.7	0	70-130		%Rec	5	3/14/2016 4:30:29 PM	R32780
Surr: Toluene-d8	102	0	70-130		%Rec	5	3/14/2016 4:30:29 PM	R32780

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: RW-6

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 10:10:00 AM

Lab ID: 1603424-002

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	6.1	0.69	1.0		mg/L	1	3/10/2016 11:17:35 AM	24183
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/10/2016 11:17:35 AM	24183
Surr: DNOP	90.3	0	70-141		%Rec	1	3/10/2016 11:17:35 AM	24183
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	12	0.51	1.0		mg/L	20	3/9/2016 4:24:25 PM	A32685
Surr: BFB	113	0	49.5-130		%Rec	20	3/9/2016 4:24:25 PM	A32685
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	390	0.96	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Toluene	190	0.89	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Ethylbenzene	510	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Methyl tert-butyl ether (MTBE)	21	2.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2,4-Trimethylbenzene	75	1.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,3,5-Trimethylbenzene	130	1.2	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2-Dichloroethane (EDC)	ND	0.53	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2-Dibromoethane (EDB)	ND	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Naphthalene	590	4.2	100		µg/L	50	3/11/2016 8:58:15 PM	R32763
1-Methylnaphthalene	280	2.0	40		µg/L	10	3/14/2016 4:59:11 PM	R32780
2-Methylnaphthalene	330	1.6	40		µg/L	10	3/14/2016 4:59:11 PM	R32780
Acetone	35	8.8	100	J	µg/L	10	3/14/2016 4:59:11 PM	R32780
Bromobenzene	ND	0.80	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Bromodichloromethane	ND	0.98	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Bromoform	ND	1.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Bromomethane	ND	7.8	30		µg/L	10	3/14/2016 4:59:11 PM	R32780
2-Butanone	14	3.2	100	J	µg/L	10	3/14/2016 4:59:11 PM	R32780
Carbon disulfide	ND	6.0	100		µg/L	10	3/14/2016 4:59:11 PM	R32780
Carbon Tetrachloride	ND	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Chlorobenzene	ND	1.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Chloroethane	ND	1.5	20		µg/L	10	3/14/2016 4:59:11 PM	R32780
Chloroform	ND	0.89	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Chloromethane	ND	2.1	30		µg/L	10	3/14/2016 4:59:11 PM	R32780
2-Chlorotoluene	ND	4.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
4-Chlorotoluene	ND	1.3	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
cis-1,2-DCE	ND	1.2	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
cis-1,3-Dichloropropene	ND	1.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2-Dibromo-3-chloropropane	ND	1.5	20		µg/L	10	3/14/2016 4:59:11 PM	R32780
Dibromochloromethane	ND	0.87	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Dibromomethane	ND	1.2	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2-Dichlorobenzene	ND	4.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: RW-6

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 10:10:00 AM

Lab ID: 1603424-002

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,3-Dichlorobenzene	ND	1.4	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,4-Dichlorobenzene	ND	1.4	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Dichlorodifluoromethane	ND	3.2	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1-Dichloroethane	ND	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1-Dichloroethene	ND	0.76	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2-Dichloropropane	ND	0.47	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,3-Dichloropropane	ND	1.6	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
2,2-Dichloropropane	ND	1.2	20		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1-Dichloropropene	ND	1.3	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Hexachlorobutadiene	ND	2.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
2-Hexanone	ND	3.6	100		µg/L	10	3/14/2016 4:59:11 PM	R32780
Isopropylbenzene	45	0.98	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
4-Isopropyltoluene	10	1.4	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
4-Methyl-2-pentanone	ND	1.5	100		µg/L	10	3/14/2016 4:59:11 PM	R32780
Methylene Chloride	ND	0.63	30		µg/L	10	3/14/2016 4:59:11 PM	R32780
n-Butylbenzene	20	1.6	30	J	µg/L	10	3/14/2016 4:59:11 PM	R32780
n-Propylbenzene	93	1.3	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
sec-Butylbenzene	12	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Styrene	ND	0.95	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
tert-Butylbenzene	ND	0.96	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1,1,2-Tetrachloroethane	ND	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1,2,2-Tetrachloroethane	ND	1.1	20		µg/L	10	3/14/2016 4:59:11 PM	R32780
Tetrachloroethene (PCE)	ND	1.5	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
trans-1,2-DCE	ND	4.0	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
trans-1,3-Dichloropropene	ND	0.85	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2,3-Trichlorobenzene	ND	1.1	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2,4-Trichlorobenzene	ND	1.3	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1,1-Trichloroethane	ND	0.63	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,1,2-Trichloroethane	ND	0.77	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Trichloroethene (TCE)	ND	1.8	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Trichlorofluoromethane	ND	0.88	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
1,2,3-Trichloropropane	ND	1.1	20		µg/L	10	3/14/2016 4:59:11 PM	R32780
Vinyl chloride	ND	0.63	10		µg/L	10	3/14/2016 4:59:11 PM	R32780
Xylenes, Total	1200	3.2	15		µg/L	10	3/14/2016 4:59:11 PM	R32780
Surr: 1,2-Dichloroethane-d4	86.5	0	70-130		%Rec	10	3/14/2016 4:59:11 PM	R32780
Surr: 4-Bromofluorobenzene	92.0	0	70-130		%Rec	10	3/14/2016 4:59:11 PM	R32780
Surr: Dibromofluoromethane	96.7	0	70-130		%Rec	10	3/14/2016 4:59:11 PM	R32780
Surr: Toluene-d8	103	0	70-130		%Rec	10	3/14/2016 4:59:11 PM	R32780

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: RW-2

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 11:45:00 AM

Lab ID: 1603424-003

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	7.2	0.69	1.0		mg/L	1	3/10/2016 11:38:59 AM	24183
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/10/2016 11:38:59 AM	24183
Surr: DNOP	91.4	0	70-141		%Rec	1	3/10/2016 11:38:59 AM	24183
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	160	5.1	10		mg/L	200	3/9/2016 4:49:01 PM	A32685
Surr: BFB	92.3	0	49.5-130		%Rec	200	3/9/2016 4:49:01 PM	A32685
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	46000	96	1000		µg/L	1000	3/14/2016 5:27:50 PM	R32780
Toluene	4100	4.5	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Ethylbenzene	1200	5.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Methyl tert-butyl ether (MTBE)	1900	11	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2,4-Trimethylbenzene	180	5.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,3,5-Trimethylbenzene	28	5.8	50	J	µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2-Dichloroethane (EDC)	ND	2.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2-Dibromoethane (EDB)	ND	5.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Naphthalene	100	4.2	100		µg/L	50	3/11/2016 9:56:03 PM	R32763
1-Methylnaphthalene	69	10	200	J	µg/L	50	3/11/2016 9:56:03 PM	R32763
2-Methylnaphthalene	28	7.9	200	J	µg/L	50	3/11/2016 9:56:03 PM	R32763
Acetone	ND	44	500		µg/L	50	3/11/2016 9:56:03 PM	R32763
Bromobenzene	ND	4.0	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Bromodichloromethane	ND	4.9	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Bromoform	ND	5.1	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Bromomethane	ND	39	150		µg/L	50	3/11/2016 9:56:03 PM	R32763
2-Butanone	ND	16	500		µg/L	50	3/11/2016 9:56:03 PM	R32763
Carbon disulfide	ND	30	500		µg/L	50	3/11/2016 9:56:03 PM	R32763
Carbon Tetrachloride	ND	5.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Chlorobenzene	ND	5.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Chloroethane	ND	7.3	100		µg/L	50	3/11/2016 9:56:03 PM	R32763
Chloroform	ND	4.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Chloromethane	ND	11	150		µg/L	50	3/11/2016 9:56:03 PM	R32763
2-Chlorotoluene	ND	20	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
4-Chlorotoluene	ND	6.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
cis-1,2-DCE	ND	6.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
cis-1,3-Dichloropropene	ND	5.0	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2-Dibromo-3-chloropropane	ND	7.7	100		µg/L	50	3/11/2016 9:56:03 PM	R32763
Dibromochloromethane	ND	4.3	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Dibromomethane	ND	6.0	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2-Dichlorobenzene	ND	20	50		µg/L	50	3/11/2016 9:56:03 PM	R32763

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: RW-2

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 11:45:00 AM

Lab ID: 1603424-003

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,3-Dichlorobenzene	ND	7.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,4-Dichlorobenzene	ND	7.1	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Dichlorodifluoromethane	ND	16	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1-Dichloroethane	ND	5.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1-Dichloroethene	ND	3.8	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2-Dichloropropane	ND	2.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,3-Dichloropropane	ND	7.8	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
2,2-Dichloropropane	ND	6.0	100		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1-Dichloropropene	ND	6.7	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Hexachlorobutadiene	ND	9.9	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
2-Hexanone	ND	18	500		µg/L	50	3/11/2016 9:56:03 PM	R32763
Isopropylbenzene	11	4.9	50	J	µg/L	50	3/11/2016 9:56:03 PM	R32763
4-Isopropyltoluene	ND	7.0	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
4-Methyl-2-pentanone	ND	7.5	500		µg/L	50	3/11/2016 9:56:03 PM	R32763
Methylene Chloride	ND	3.1	150		µg/L	50	3/11/2016 9:56:03 PM	R32763
n-Butylbenzene	ND	8.0	150		µg/L	50	3/11/2016 9:56:03 PM	R32763
n-Propylbenzene	45	6.6	50	J	µg/L	50	3/11/2016 9:56:03 PM	R32763
sec-Butylbenzene	ND	5.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Styrene	ND	4.8	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
tert-Butylbenzene	ND	4.8	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1,1,2-Tetrachloroethane	ND	5.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1,2,2-Tetrachloroethane	ND	5.3	100		µg/L	50	3/11/2016 9:56:03 PM	R32763
Tetrachloroethene (PCE)	ND	7.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
trans-1,2-DCE	ND	20	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
trans-1,3-Dichloropropene	ND	4.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2,3-Trichlorobenzene	ND	5.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2,4-Trichlorobenzene	ND	6.6	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1,1-Trichloroethane	ND	3.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,1,2-Trichloroethane	ND	3.8	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Trichloroethene (TCE)	ND	8.8	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Trichlorofluoromethane	ND	4.4	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
1,2,3-Trichloropropane	ND	5.6	100		µg/L	50	3/11/2016 9:56:03 PM	R32763
Vinyl chloride	ND	3.2	50		µg/L	50	3/11/2016 9:56:03 PM	R32763
Xylenes, Total	3500	16	75		µg/L	50	3/11/2016 9:56:03 PM	R32763
Surr: 1,2-Dichloroethane-d4	102	0	70-130		%Rec	50	3/11/2016 9:56:03 PM	R32763
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	50	3/11/2016 9:56:03 PM	R32763
Surr: Dibromofluoromethane	109	0	70-130		%Rec	50	3/11/2016 9:56:03 PM	R32763
Surr: Toluene-d8	99.6	0	70-130		%Rec	50	3/11/2016 9:56:03 PM	R32763

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: BW to EP-2 Inlet

Project: Quarterly GW Sampling

Collection Date: 3/7/2016 1:45:00 PM

Lab ID: 1603424-004

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	ND	0.23	1.0		mg/L	10	3/19/2016 5:39:58 AM	A32919
Chloride	4300	14	250		mg/L	500	3/19/2016 5:52:21 AM	A32919
Bromide	ND	0.32	1.0		mg/L	10	3/19/2016 5:39:58 AM	A32919
Phosphorus, Orthophosphate (As P')	ND	2.2	5.0	H	mg/L	10	3/19/2016 5:39:58 AM	A32919
Sulfate	400	6.4	50		mg/L	100	3/9/2016 5:44:30 PM	R32690
Nitrate+Nitrite as N	ND	1.7	4.0		mg/L	20	3/19/2016 6:04:46 AM	A32919
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Calcium	300	1.3	5.0		mg/L	5	3/24/2016 4:34:17 PM	B33038
Magnesium	52	0.013	1.0		mg/L	1	3/24/2016 4:32:18 PM	B33038
Potassium	15	0.18	1.0		mg/L	1	3/24/2016 4:32:18 PM	B33038
Sodium	2400	4.8	50		mg/L	50	3/24/2016 4:36:20 PM	B33038

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: Quarterly GW Sampling

Collection Date: 3/8/2016 9:45:00 AM

Lab ID: 1603424-005

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	3/10/2016 12:00:18 PM	24183
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/10/2016 12:00:18 PM	24183
Surr: DNOP	87.4	0	70-141		%Rec	1	3/10/2016 12:00:18 PM	24183
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	4.4	0.13	0.25		mg/L	5	3/9/2016 5:13:39 PM	A32685
Surr: BFB	85.3	0	49.5-130		%Rec	5	3/9/2016 5:13:39 PM	A32685
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.091	0.0013	0.0020		mg/L	1	3/24/2016 4:38:06 PM	B33038
Cadmium	ND	0.00075	0.0020		mg/L	1	3/24/2016 4:38:06 PM	B33038
Chromium	ND	0.0018	0.0060		mg/L	1	3/24/2016 4:38:06 PM	B33038
Copper	ND	0.0040	0.0060		mg/L	1	3/24/2016 4:38:06 PM	B33038
Iron	0.061	0.0091	0.020		mg/L	1	3/24/2016 4:38:06 PM	B33038
Manganese	0.037	0.00032	0.0020		mg/L	1	3/24/2016 4:38:06 PM	B33038
Silver	ND	0.0028	0.0050		mg/L	1	3/24/2016 4:38:06 PM	B33038
Zinc	ND	0.0028	0.010		mg/L	1	3/24/2016 4:38:06 PM	B33038
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.092	0.0011	0.0020		mg/L	1	3/18/2016 4:40:47 PM	24203
Cadmium	ND	0.00062	0.0020		mg/L	1	3/18/2016 4:40:47 PM	24203
Chromium	ND	0.0022	0.0060		mg/L	1	3/18/2016 4:40:47 PM	24203
Copper	ND	0.0051	0.0060		mg/L	1	3/18/2016 4:40:47 PM	24203
Iron	0.052	0.0072	0.020		mg/L	1	3/18/2016 4:40:47 PM	24203
Manganese	0.034	0.0015	0.0020		mg/L	1	3/18/2016 4:40:47 PM	24203
Silver	ND	0.0021	0.0050		mg/L	1	3/18/2016 4:40:47 PM	24203
Zinc	ND	0.0039	0.010		mg/L	1	3/18/2016 4:40:47 PM	24203
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0019	0.00032	0.0050	J	mg/L	5	3/31/2016 3:00:25 PM	B33223
Lead	0.00022	0.000026	0.00050	J	mg/L	1	3/30/2016 8:04:07 PM	B33186
Selenium	0.0043	0.00097	0.0050	J	mg/L	5	3/31/2016 3:00:25 PM	B33223
Uranium	0.049	0.000024	0.0025	*	mg/L	5	3/31/2016 3:00:25 PM	B33223
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	ND	0.0015	0.0050		mg/L	5	3/24/2016 2:56:34 PM	24203
Lead	ND	0.00024	0.0025		mg/L	5	3/24/2016 2:56:34 PM	24203
Selenium	0.0026	0.00062	0.0050	J	mg/L	5	3/24/2016 2:56:34 PM	24203
Uranium	0.047	0.000025	0.0025	*	mg/L	5	3/24/2016 2:56:34 PM	24203
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	3/14/2016 5:01:56 PM	24206

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: Quarterly GW Sampling

Collection Date: 3/8/2016 9:45:00 AM

Lab ID: 1603424-005

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	3.1	0.19	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Toluene	ND	0.18	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Ethylbenzene	ND	0.22	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Methyl tert-butyl ether (MTBE)	3500	11	50		µg/L	50	3/14/2016 5:56:49 PM	R32780
1,2,4-Trimethylbenzene	ND	0.21	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,3,5-Trimethylbenzene	ND	0.23	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2-Dichloroethane (EDC)	0.50	0.11	2.0	J	µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2-Dibromoethane (EDB)	ND	0.22	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Naphthalene	ND	0.17	4.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1-Methylnaphthalene	ND	0.41	8.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
2-Methylnaphthalene	ND	0.32	8.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Acetone	3.0	1.8	20	J	µg/L	2	3/14/2016 6:25:37 PM	R32780
Bromobenzene	ND	0.16	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Bromodichloromethane	ND	0.20	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Bromoform	ND	0.20	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Bromomethane	ND	1.6	6.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
2-Butanone	ND	0.64	20		µg/L	2	3/14/2016 6:25:37 PM	R32780
Carbon disulfide	ND	1.2	20		µg/L	2	3/14/2016 6:25:37 PM	R32780
Carbon Tetrachloride	ND	0.22	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Chlorobenzene	ND	0.21	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Chloroethane	ND	0.29	4.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Chloroform	ND	0.18	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Chloromethane	ND	0.43	6.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
2-Chlorotoluene	ND	0.80	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
4-Chlorotoluene	ND	0.26	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
cis-1,2-DCE	ND	0.25	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
cis-1,3-Dichloropropene	ND	0.20	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2-Dibromo-3-chloropropane	ND	0.31	4.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Dibromochloromethane	ND	0.17	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Dibromomethane	ND	0.24	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2-Dichlorobenzene	ND	0.80	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,3-Dichlorobenzene	ND	0.29	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,4-Dichlorobenzene	ND	0.29	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Dichlorodifluoromethane	ND	0.65	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,1-Dichloroethane	ND	0.22	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,1-Dichloroethene	ND	0.15	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2-Dichloropropane	ND	0.094	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,3-Dichloropropane	ND	0.31	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
2,2-Dichloropropane	ND	0.24	4.0		µg/L	2	3/14/2016 6:25:37 PM	R32780

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: OW-30

Project: Quarterly GW Sampling

Collection Date: 3/8/2016 9:45:00 AM

Lab ID: 1603424-005

Matrix: AQUEOUS

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,1-Dichloropropene	ND	0.27	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Hexachlorobutadiene	ND	0.40	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
2-Hexanone	ND	0.72	20		µg/L	2	3/14/2016 6:25:37 PM	R32780
Isopropylbenzene	ND	0.20	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
4-Isopropyltoluene	ND	0.28	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
4-Methyl-2-pentanone	ND	0.30	20		µg/L	2	3/14/2016 6:25:37 PM	R32780
Methylene Chloride	0.63	0.13	6.0	J	µg/L	2	3/14/2016 6:25:37 PM	R32780
n-Butylbenzene	ND	0.32	6.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
n-Propylbenzene	ND	0.26	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
sec-Butylbenzene	ND	0.22	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Styrene	ND	0.19	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
tert-Butylbenzene	ND	0.19	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,1,1,2-Tetrachloroethane	ND	0.22	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,1,2,2-Tetrachloroethane	ND	0.21	4.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Tetrachloroethene (PCE)	ND	0.30	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
trans-1,2-DCE	ND	0.80	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
trans-1,3-Dichloropropene	ND	0.17	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2,3-Trichlorobenzene	ND	0.23	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2,4-Trichlorobenzene	ND	0.27	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,1,1-Trichloroethane	ND	0.13	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,1,2-Trichloroethane	ND	0.15	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Trichloroethene (TCE)	ND	0.35	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Trichlorofluoromethane	ND	0.18	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
1,2,3-Trichloropropane	ND	0.22	4.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Vinyl chloride	ND	0.13	2.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Xylenes, Total	ND	0.65	3.0		µg/L	2	3/14/2016 6:25:37 PM	R32780
Surr: 1,2-Dichloroethane-d4	105	0	70-130		%Rec	2	3/14/2016 6:25:37 PM	R32780
Surr: 4-Bromofluorobenzene	105	0	70-130		%Rec	2	3/14/2016 6:25:37 PM	R32780
Surr: Dibromofluoromethane	119	0	70-130		%Rec	2	3/14/2016 6:25:37 PM	R32780
Surr: Toluene-d8	107	0	70-130		%Rec	2	3/14/2016 6:25:37 PM	R32780

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1603424-006

Matrix: TRIP BLANK

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
Benzene	ND	0.096	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Toluene	ND	0.089	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Ethylbenzene	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Naphthalene	ND	0.083	2.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Acetone	6.0	0.88	10	J	µg/L	1	3/14/2016 4:01:42 PM	R32780
Bromobenzene	ND	0.080	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Bromodichloromethane	ND	0.098	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Bromoform	ND	0.10	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Bromomethane	ND	0.78	3.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
2-Butanone	1.0	0.32	10	J	µg/L	1	3/14/2016 4:01:42 PM	R32780
Carbon disulfide	ND	0.60	10		µg/L	1	3/14/2016 4:01:42 PM	R32780
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Chlorobenzene	ND	0.10	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Chloroethane	ND	0.15	2.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Chloroform	ND	0.089	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Chloromethane	ND	0.21	3.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Dibromochloromethane	ND	0.087	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Dibromomethane	ND	0.12	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	3/14/2016 4:01:42 PM	R32780

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603424

Date Reported: 4/7/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1603424-006

Matrix: TRIP BLANK

Received Date: 3/8/2016 3:23:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: AG	
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
2-Hexanone	ND	0.36	10		µg/L	1	3/14/2016 4:01:42 PM	R32780
Isopropylbenzene	ND	0.098	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	3/14/2016 4:01:42 PM	R32780
Methylene Chloride	ND	0.063	3.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
n-Butylbenzene	ND	0.16	3.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
n-Propylbenzene	ND	0.13	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Styrene	ND	0.095	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Vinyl chloride	ND	0.063	1.0		µg/L	1	3/14/2016 4:01:42 PM	R32780
Xylenes, Total	ND	0.32	1.5		µg/L	1	3/14/2016 4:01:42 PM	R32780
Surr: 1,2-Dichloroethane-d4	103	0	70-130		%Rec	1	3/14/2016 4:01:42 PM	R32780
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	1	3/14/2016 4:01:42 PM	R32780
Surr: Dibromofluoromethane	106	0	70-130		%Rec	1	3/14/2016 4:01:42 PM	R32780
Surr: Toluene-d8	106	0	70-130		%Rec	1	3/14/2016 4:01:42 PM	R32780

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB-B		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	PBW		Batch ID:	B33038		RunNo:	33038			
Prep Date:			Analysis Date:	3/24/2016		SeqNo:	1013676	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-B		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	LCSW		Batch ID:	B33038		RunNo:	33038			
Prep Date:			Analysis Date:	3/24/2016		SeqNo:	1013677	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.9	85	115			
Cadmium	0.49	0.0020	0.5000	0	97.0	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			
Copper	0.47	0.0060	0.5000	0	93.2	85	115			
Iron	0.49	0.020	0.5000	0	98.5	85	115			
Magnesium	50	1.0	50.00	0	101	85	115			
Manganese	0.46	0.0020	0.5000	0	93.0	85	115			
Potassium	49	1.0	50.00	0	98.6	85	115			
Silver	0.098	0.0050	0.1000	0	98.4	85	115			
Sodium	49	1.0	50.00	0	99.0	85	115			
Zinc	0.48	0.010	0.5000	0	96.1	85	115			

Sample ID	LLCS-B		SampType:	LCSLL		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	BatchQC		Batch ID:	B33038		RunNo:	33038			
Prep Date:			Analysis Date:	3/24/2016		SeqNo:	1013678	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0016	0.0020	0.002000	0	79.0	50	150			J
Cadmium	0.0023	0.0020	0.002000	0	113	50	150			
Calcium	0.53	1.0	0.5000	0	106	50	150			J
Chromium	0.0066	0.0060	0.006000	0	110	50	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	LLLCS-B		SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	BatchQC		Batch ID: B33038			RunNo: 33038				
Prep Date:			Analysis Date: 3/24/2016			SeqNo: 1013678		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.0068	0.0060	0.006000	0	113	50	150			
Iron	0.022	0.020	0.02000	0	110	50	150			
Magnesium	0.52	1.0	0.5000	0	104	50	150			J
Manganese	0.0020	0.0020	0.002000	0	101	50	150			
Potassium	0.56	1.0	0.5000	0	112	50	150			J
Silver	0.0044	0.0050	0.005000	0	89.0	50	150			J
Sodium	0.50	1.0	0.5000	0	101	50	150			J
Zinc	0.0049	0.010	0.005000	0	98.8	50	150			J

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB-24203	SampType: MBLK		TestCode: EPA Method 200.7: Total Metals							
Client ID: PBW	Batch ID: 24203		RunNo: 32754							
Prep Date: 3/10/2016	Analysis Date: 3/11/2016		SeqNo: 1002486		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-24203	SampType: LCS		TestCode: EPA Method 200.7: Total Metals							
Client ID: LCSW	Batch ID: 24203		RunNo: 32754							
Prep Date: 3/10/2016	Analysis Date: 3/11/2016		SeqNo: 1002487		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	99.5	85	115			
Cadmium	0.51	0.0020	0.5000	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	98.3	85	115			
Copper	0.50	0.0060	0.5000	0	99.6	85	115			
Iron	0.49	0.020	0.5000	0	97.8	85	115			
Manganese	0.49	0.0020	0.5000	0	98.3	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Zinc	0.50	0.010	0.5000	0	100	85	115			

Sample ID LLCS-24203	SampType: LCSLL		TestCode: EPA Method 200.7: Total Metals							
Client ID: BatchQC	Batch ID: 24203		RunNo: 32754							
Prep Date: 3/10/2016	Analysis Date: 3/11/2016		SeqNo: 1002488		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0015	0.0020	0.002000	0	76.0	50	150			J
Cadmium	0.0022	0.0020	0.002000	0	110	50	150			
Chromium	0.0062	0.0060	0.006000	0	103	50	150			
Copper	0.0057	0.0060	0.006000	0	94.3	50	150			J
Iron	0.019	0.020	0.02000	0	96.8	50	150			J
Manganese	0.0018	0.0020	0.002000	0	88.5	50	150			J
Silver	0.0048	0.0050	0.005000	0	96.8	50	150			J
Zinc	0.0065	0.010	0.005000	0	130	50	150			J

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: LCSW	Batch ID: B33186			RunNo: 33186						
Prep Date:	Analysis Date: 3/30/2016			SeqNo: 1019346		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.012	0.00050	0.01250	0	94.7	85	115			

Sample ID LLCS	SampType: LCSLL			TestCode: EPA 200.8: Dissolved Metals						
Client ID: BatchQC	Batch ID: B33186			RunNo: 33186						
Prep Date:	Analysis Date: 3/30/2016			SeqNo: 1019347		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.00050	0.00050	0.0005000	0	99.6	50	150			J

Sample ID MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID: PBW	Batch ID: B33186			RunNo: 33186						
Prep Date:	Analysis Date: 3/30/2016			SeqNo: 1019348		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	ND	0.00050								

Sample ID LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: LCSW	Batch ID: B33223			RunNo: 33223						
Prep Date:	Analysis Date: 3/31/2016			SeqNo: 1020326		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	0.025	0.0010	0.02500	0	102	85	115			
Uranium	0.013	0.00050	0.01250	0	101	85	115			

Sample ID LLCS	SampType: LCSLL			TestCode: EPA 200.8: Dissolved Metals						
Client ID: BatchQC	Batch ID: B33223			RunNo: 33223						
Prep Date:	Analysis Date: 3/31/2016			SeqNo: 1020327		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0011	0.0010	0.001000	0	108	50	150			
Selenium	0.0011	0.0010	0.001000	0	109	50	150			
Uranium	0.00051	0.00050	0.0005000	0	101	50	150			

Sample ID MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID: PBW	Batch ID: B33223			RunNo: 33223						
Prep Date:	Analysis Date: 3/31/2016			SeqNo: 1020328		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID:	PBW	Batch ID: B33223			RunNo: 33223						
Prep Date:		Analysis Date: 3/31/2016			SeqNo: 1020328		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium		ND	0.0010								
Uranium		ND	0.00050								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB-24203	SampType: MBLK		TestCode: 200.8 ICPMS Metals:Total							
Client ID: PBW	Batch ID: 24203		RunNo: 32737							
Prep Date:	Analysis Date: 3/11/2016		SeqNo: 1002117		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID MSLCS-24203	SampType: LCS		TestCode: 200.8 ICPMS Metals:Total							
Client ID: LCSW	Batch ID: 24203		RunNo: 32737							
Prep Date: 3/10/2016	Analysis Date: 3/11/2016		SeqNo: 1002118		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	100	85	115			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.024	0.0010	0.02500	0	95.9	85	115			
Uranium	0.013	0.00050	0.01250	0	100	85	115			

Sample ID MSLLCS-24203	SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total							
Client ID: BatchQC	Batch ID: 24203		RunNo: 32737							
Prep Date: 3/10/2016	Analysis Date: 3/11/2016		SeqNo: 1002119		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0010	0.0010	0.001000	0	102	50	150			
Lead	0.00041	0.00050	0.0005000	0	81.7	50	150			J
Selenium	0.00081	0.0010	0.001000	0	80.6	50	150			J
Uranium	0.00044	0.00050	0.0005000	0	88.1	50	150			J

Sample ID 1603424-005CMSLL	SampType: MSLL		TestCode: 200.8 ICPMS Metals:Total							
Client ID: OW-30	Batch ID: 24203		RunNo: 33048							
Prep Date: 3/10/2016	Analysis Date: 3/24/2016		SeqNo: 1013850		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.027	0.0050	0.02500	0	107	70	130			
Lead	0.014	0.0025	0.01250	0	110	70	130			
Selenium	0.027	0.0050	0.02500	0.002628	99.0	70	130			
Uranium	0.062	0.0025	0.01250	0.04722	118	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB-24206	SampType:	mblk	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	24206	RunNo:	32782					
Prep Date:	3/10/2016	Analysis Date:	3/14/2016	SeqNo:	1004542	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-24206	SampType:	lcs	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	24206	RunNo:	32782					
Prep Date:	3/10/2016	Analysis Date:	3/14/2016	SeqNo:	1004545	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	80	120			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R32690			RunNo: 32690						
Prep Date:	Analysis Date: 3/9/2016			SeqNo: 1000486		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS			TestCode: EPA Method 300.0: Anions						
Client ID: LCSW	Batch ID: R32690			RunNo: 32690						
Prep Date:	Analysis Date: 3/9/2016			SeqNo: 1000487		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.9	0.50	10.00	0	99.2	90	110			

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: A32919			RunNo: 32919						
Prep Date:	Analysis Date: 3/18/2016			SeqNo: 1009533		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	0.10	0.50								J
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	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: A32919			RunNo: 32919						
Prep Date:	Analysis Date: 3/18/2016			SeqNo: 1009534		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.55	0.10	0.5000	0	109	90	110			
Chloride	4.8	0.50	5.000	0	96.5	90	110			
Bromide	2.6	0.10	2.500	0	103	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.8	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	101	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB-24183	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: PBW	Batch ID: 24183		RunNo: 32691							
Prep Date: 3/10/2016	Analysis Date: 3/10/2016		SeqNo: 1000583		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.89		1.000		89.0	70	141			

Sample ID LCS-24183	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: LCSW	Batch ID: 24183		RunNo: 32691							
Prep Date: 3/10/2016	Analysis Date: 3/10/2016		SeqNo: 1000584		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.4	1.0	5.000	0	87.0	71.3	139			
Surr: DNOP	0.44		0.5000		87.1	70	141			

Sample ID 1603424-001BMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: RW-5	Batch ID: 24183		RunNo: 32691							
Prep Date: 3/10/2016	Analysis Date: 3/10/2016		SeqNo: 1000587		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	8.6	1.0	5.000	3.375	104	59.4	160			
Surr: DNOP	0.43		0.5000		85.7	70	141			

Sample ID 1603424-001BMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range							
Client ID: RW-5	Batch ID: 24183		RunNo: 32691							
Prep Date: 3/10/2016	Analysis Date: 3/10/2016		SeqNo: 1001359		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	8.3	1.0	5.000	3.375	99.0	59.4	160	3.10	20	
Surr: DNOP	0.44		0.5000		87.8	70	141	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: A32685		RunNo: 32685							
Prep Date:	Analysis Date: 3/9/2016		SeqNo: 1000174		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		91.0	49.5	130			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: A32685		RunNo: 32685							
Prep Date:	Analysis Date: 3/9/2016		SeqNo: 1000175		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	103	80	120			
Surr: BFB	20		20.00		101	49.5	130			

Sample ID 1603424-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: RW-5	Batch ID: A32685		RunNo: 32685							
Prep Date:	Analysis Date: 3/9/2016		SeqNo: 1000184		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.9	0.25	2.500	5.509	95.6	70	130			
Surr: BFB	130		100.0		128	49.5	130			

Sample ID 1603424-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: RW-5	Batch ID: A32685		RunNo: 32685							
Prep Date:	Analysis Date: 3/9/2016		SeqNo: 1000185		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	7.6	0.25	2.500	5.509	83.8	70	130	3.83	20	
Surr: BFB	130		100.0		126	49.5	130	0	0	

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R32763			RunNo: 32763						
Prep Date:	Analysis Date: 3/11/2016			SeqNo: 1003148		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	113	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R32763			RunNo: 32763						
Prep Date:	Analysis Date: 3/11/2016			SeqNo: 1003149		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	0.14	1.0								J
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	0.15	1.0								J
cis-1,2-DCE	ND	1.0								

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R32763			RunNo: 32763						
Prep Date:	Analysis Date: 3/11/2016			SeqNo: 1003149	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	0.48	3.0								J
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								

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R32763			RunNo: 32763						
Prep Date:	Analysis Date: 3/11/2016			SeqNo: 1003149		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	12		10.00		122	70	130			
Surr: Toluene-d8	11		10.00		110	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R32780			RunNo: 32780						
Prep Date:	Analysis Date: 3/14/2016			SeqNo: 1004330		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	110	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	25	1.0	20.00	0	124	70	130			
Trichloroethene (TCE)	23	1.0	20.00	0	114	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		113	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	12		10.00		124	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R32780			RunNo: 32780						
Prep Date:	Analysis Date: 3/14/2016			SeqNo: 1004331		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								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R32780			RunNo: 32780					
Prep Date:		Analysis Date: 3/14/2016			SeqNo: 1004331	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	0.43	3.0								J
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								

Qualifiers:

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

B Analyte detected in the associated Method Blank
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603424

07-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	rb	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW	Batch ID: R32780				RunNo: 32780				
Prep Date:		Analysis Date: 3/14/2016				SeqNo: 1004331	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Qualifiers:

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

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



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: 1603424

ReptNo: 1

Received by/date:

AG

03/08/16

Logged By: Ashley Gallegos

3/8/2016 3:23:00 PM

AG

Completed By: Ashley Gallegos

3/8/2016 5:06:33 PM

AG

Reviewed By:

IO

03/08/16 *IO*

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ?

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

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



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

April 04, 2016

Cheryl Johnson

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

RE: Quarterly GW Sampling

OrderNo.: 1603152

Dear Cheryl Johnson:

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 8:40:00 AM

Lab ID: 1603152-001

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	3.6	0.69	1.0		mg/L	1	3/7/2016 1:16:41 PM	24101
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/7/2016 1:16:41 PM	24101
Surr: DNOP	95.2	0	70-141		%Rec	1	3/7/2016 1:16:41 PM	24101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	24	0.25	0.50		mg/L	10	3/4/2016 2:01:26 PM	A32596
Surr: BFB	102	0	49.5-130		%Rec	10	3/4/2016 2:01:26 PM	A32596
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Acenaphthylene	ND	7.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Aniline	ND	9.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Anthracene	ND	6.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Azobenzene	ND	9.3	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Benzoic acid	36	9.8	20		µg/L	1	3/13/2016 7:50:17 PM	24121
Benzyl alcohol	ND	8.0	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/13/2016 7:50:17 PM	24121
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Carbazole	ND	7.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/13/2016 7:50:17 PM	24121
4-Chloroaniline	ND	7.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2-Chlorophenol	ND	8.7	10		µg/L	1	3/13/2016 7:50:17 PM	24121
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Chrysene	ND	6.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Dibenzofuran	ND	8.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/13/2016 7:50:17 PM	24121
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 8:40:00 AM

Lab ID: 1603152-001

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/13/2016 7:50:17 PM	24121
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Diethyl phthalate	ND	8.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/13/2016 7:50:17 PM	24121
2,4-Dimethylphenol	5.7	4.7	10	J	µg/L	1	3/13/2016 7:50:17 PM	24121
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/13/2016 7:50:17 PM	24121
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/13/2016 7:50:17 PM	24121
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Fluoranthene	ND	6.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Fluorene	ND	7.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Hexachloroethane	ND	5.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Isophorone	ND	8.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2-Methylphenol	ND	8.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
3+4-Methylphenol	120	7.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Naphthalene	ND	5.9	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2-Nitroaniline	ND	9.0	10		µg/L	1	3/13/2016 7:50:17 PM	24121
3-Nitroaniline	ND	8.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
4-Nitroaniline	ND	9.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Nitrobenzene	ND	7.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2-Nitrophenol	ND	7.6	10		µg/L	1	3/13/2016 7:50:17 PM	24121
4-Nitrophenol	ND	6.7	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Pentachlorophenol	ND	7.6	20		µg/L	1	3/13/2016 7:50:17 PM	24121
Phenanthrene	ND	6.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Phenol	37	5.1	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Pyrene	ND	5.5	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Pyridine	ND	6.7	10		µg/L	1	3/13/2016 7:50:17 PM	24121
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/13/2016 7:50:17 PM	24121
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/13/2016 7:50:17 PM	24121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 8:40:00 AM

Lab ID: 1603152-001

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/13/2016 7:50:17 PM	24121
Surr: 2-Fluorophenol	22.9	0	4.63-113		%Rec	1	3/13/2016 7:50:17 PM	24121
Surr: Phenol-d5	21.8	0	4.13-124		%Rec	1	3/13/2016 7:50:17 PM	24121
Surr: 2,4,6-Tribromophenol	41.6	0	5.14-132		%Rec	1	3/13/2016 7:50:17 PM	24121
Surr: Nitrobenzene-d5	45.9	0	9.13-140		%Rec	1	3/13/2016 7:50:17 PM	24121
Surr: 2-Fluorobiphenyl	34.7	0	10.8-132		%Rec	1	3/13/2016 7:50:17 PM	24121
Surr: 4-Terphenyl-d14	37.4	0	12.9-107		%Rec	1	3/13/2016 7:50:17 PM	24121
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	4600	9.6	100		µg/L	100	3/8/2016 12:32:06 PM	R32660
Toluene	340	0.89	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Ethylbenzene	150	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Methyl tert-butyl ether (MTBE)	480	2.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2,4-Trimethylbenzene	140	1.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,3,5-Trimethylbenzene	67	1.2	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2-Dichloroethane (EDC)	ND	0.53	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2-Dibromoethane (EDB)	ND	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Naphthalene	16	0.83	20	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
1-Methylnaphthalene	6.7	2.0	40	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
2-Methylnaphthalene	7.2	1.6	40	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
Acetone	ND	8.8	100		µg/L	10	3/8/2016 1:00:21 PM	R32660
Bromobenzene	ND	0.80	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Bromodichloromethane	ND	0.98	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Bromoform	ND	1.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Bromomethane	ND	7.8	30		µg/L	10	3/8/2016 1:00:21 PM	R32660
2-Butanone	ND	3.2	100		µg/L	10	3/8/2016 1:00:21 PM	R32660
Carbon disulfide	ND	6.0	100		µg/L	10	3/8/2016 1:00:21 PM	R32660
Carbon Tetrachloride	ND	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Chlorobenzene	ND	1.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Chloroethane	ND	1.5	20		µg/L	10	3/8/2016 1:00:21 PM	R32660
Chloroform	ND	0.89	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Chloromethane	ND	2.1	30		µg/L	10	3/8/2016 1:00:21 PM	R32660
2-Chlorotoluene	ND	4.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
4-Chlorotoluene	ND	1.3	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
cis-1,2-DCE	ND	1.2	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
cis-1,3-Dichloropropene	ND	1.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2-Dibromo-3-chloropropane	ND	1.5	20		µg/L	10	3/8/2016 1:00:21 PM	R32660
Dibromochloromethane	ND	0.87	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Dibromomethane	ND	1.2	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2-Dichlorobenzene	ND	4.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-21

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 8:40:00 AM

Lab ID: 1603152-001

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,3-Dichlorobenzene	ND	1.4	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,4-Dichlorobenzene	ND	1.4	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Dichlorodifluoromethane	ND	3.2	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1-Dichloroethane	ND	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1-Dichloroethene	ND	0.76	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2-Dichloropropane	ND	0.47	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,3-Dichloropropane	ND	1.6	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
2,2-Dichloropropane	ND	1.2	20		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1-Dichloropropene	ND	1.3	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Hexachlorobutadiene	ND	2.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
2-Hexanone	26	3.6	100	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
Isopropylbenzene	2.7	0.98	10	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
4-Isopropyltoluene	ND	1.4	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
4-Methyl-2-pentanone	50	1.5	100	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
Methylene Chloride	2.0	0.63	30	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
n-Butylbenzene	1.7	1.6	30	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
n-Propylbenzene	6.9	1.3	10	J	µg/L	10	3/8/2016 1:00:21 PM	R32660
sec-Butylbenzene	ND	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Styrene	ND	0.95	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
tert-Butylbenzene	ND	0.96	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1,1,2-Tetrachloroethane	ND	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1,2,2-Tetrachloroethane	ND	1.1	20		µg/L	10	3/8/2016 1:00:21 PM	R32660
Tetrachloroethene (PCE)	ND	1.5	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
trans-1,2-DCE	ND	4.0	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
trans-1,3-Dichloropropene	ND	0.85	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2,3-Trichlorobenzene	ND	1.1	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2,4-Trichlorobenzene	ND	1.3	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1,1-Trichloroethane	ND	0.63	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,1,2-Trichloroethane	ND	0.77	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Trichloroethene (TCE)	ND	1.8	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Trichlorofluoromethane	ND	0.88	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
1,2,3-Trichloropropane	ND	1.1	20		µg/L	10	3/8/2016 1:00:21 PM	R32660
Vinyl chloride	ND	0.63	10		µg/L	10	3/8/2016 1:00:21 PM	R32660
Xylenes, Total	1300	3.2	15		µg/L	10	3/8/2016 1:00:21 PM	R32660
Surr: 1,2-Dichloroethane-d4	99.7	0	70-130		%Rec	10	3/8/2016 1:00:21 PM	R32660
Surr: 4-Bromofluorobenzene	113	0	70-130		%Rec	10	3/8/2016 1:00:21 PM	R32660
Surr: Dibromofluoromethane	99.6	0	70-130		%Rec	10	3/8/2016 1:00:21 PM	R32660
Surr: Toluene-d8	99.9	0	70-130		%Rec	10	3/8/2016 1:00:21 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 9:05:00 AM

Lab ID: 1603152-002

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	6.9	0.69	1.0		mg/L	1	3/7/2016 1:38:21 PM	24101
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/7/2016 1:38:21 PM	24101
Surr: DNOP	87.6	0	70-141		%Rec	1	3/7/2016 1:38:21 PM	24101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	73	1.3	2.5		mg/L	50	3/4/2016 2:25:58 PM	A32596
Surr: BFB	108	0	49.5-130		%Rec	50	3/4/2016 2:25:58 PM	A32596
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Acenaphthylene	ND	7.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Aniline	ND	9.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Anthracene	ND	6.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Azobenzene	ND	9.3	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Benzoic acid	ND	9.8	20		µg/L	1	3/13/2016 8:19:56 PM	24121
Benzyl alcohol	ND	8.0	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/13/2016 8:19:56 PM	24121
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Carbazole	ND	7.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/13/2016 8:19:56 PM	24121
4-Chloroaniline	ND	7.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2-Chlorophenol	ND	8.7	10		µg/L	1	3/13/2016 8:19:56 PM	24121
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Chrysene	ND	6.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Dibenzofuran	ND	8.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/13/2016 8:19:56 PM	24121
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 9:05:00 AM

Lab ID: 1603152-002

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/13/2016 8:19:56 PM	24121
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Diethyl phthalate	ND	8.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/13/2016 8:19:56 PM	24121
2,4-Dimethylphenol	280	23	50		µg/L	5	3/16/2016 11:28:13 AM	24121
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/13/2016 8:19:56 PM	24121
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/13/2016 8:19:56 PM	24121
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Fluoranthene	ND	6.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Fluorene	ND	7.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Hexachloroethane	ND	5.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Isophorone	ND	8.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
1-Methylnaphthalene	36	6.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2-Methylnaphthalene	23	7.0	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2-Methylphenol	96	8.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Naphthalene	50	5.9	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2-Nitroaniline	ND	9.0	10		µg/L	1	3/13/2016 8:19:56 PM	24121
3-Nitroaniline	ND	8.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
4-Nitroaniline	ND	9.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Nitrobenzene	ND	7.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2-Nitrophenol	ND	7.6	10		µg/L	1	3/13/2016 8:19:56 PM	24121
4-Nitrophenol	ND	6.7	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Pentachlorophenol	ND	7.6	20		µg/L	1	3/13/2016 8:19:56 PM	24121
Phenanthrene	ND	6.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Phenol	11	5.1	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Pyrene	ND	5.5	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Pyridine	ND	6.7	10		µg/L	1	3/13/2016 8:19:56 PM	24121
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/13/2016 8:19:56 PM	24121
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/13/2016 8:19:56 PM	24121

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 9:05:00 AM

Lab ID: 1603152-002

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/13/2016 8:19:56 PM	24121
Surr: 2-Fluorophenol	22.1	0	4.63-113		%Rec	1	3/13/2016 8:19:56 PM	24121
Surr: Phenol-d5	29.2	0	4.13-124		%Rec	1	3/13/2016 8:19:56 PM	24121
Surr: 2,4,6-Tribromophenol	45.5	0	5.14-132		%Rec	1	3/13/2016 8:19:56 PM	24121
Surr: Nitrobenzene-d5	51.7	0	9.13-140		%Rec	1	3/13/2016 8:19:56 PM	24121
Surr: 2-Fluorobiphenyl	29.2	0	10.8-132		%Rec	1	3/13/2016 8:19:56 PM	24121
Surr: 4-Terphenyl-d14	39.1	0	12.9-107		%Rec	1	3/13/2016 8:19:56 PM	24121
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	13000	48	500		µg/L	500	3/8/2016 1:28:33 PM	R32660
Toluene	470	4.5	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Ethylbenzene	1100	5.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Methyl tert-butyl ether (MTBE)	130	11	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2,4-Trimethylbenzene	1200	5.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,3,5-Trimethylbenzene	380	5.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2-Dichloroethane (EDC)	ND	2.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2-Dibromoethane (EDB)	ND	5.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Naphthalene	140	4.2	100		µg/L	50	3/8/2016 1:56:49 PM	R32660
1-Methylnaphthalene	37	10	200	J	µg/L	50	3/8/2016 1:56:49 PM	R32660
2-Methylnaphthalene	51	7.9	200	J	µg/L	50	3/8/2016 1:56:49 PM	R32660
Acetone	ND	44	500		µg/L	50	3/8/2016 1:56:49 PM	R32660
Bromobenzene	ND	4.0	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Bromodichloromethane	ND	4.9	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Bromoform	ND	5.1	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Bromomethane	ND	39	150		µg/L	50	3/8/2016 1:56:49 PM	R32660
2-Butanone	ND	16	500		µg/L	50	3/8/2016 1:56:49 PM	R32660
Carbon disulfide	ND	30	500		µg/L	50	3/8/2016 1:56:49 PM	R32660
Carbon Tetrachloride	ND	5.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Chlorobenzene	ND	5.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Chloroethane	ND	7.3	100		µg/L	50	3/8/2016 1:56:49 PM	R32660
Chloroform	ND	4.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Chloromethane	ND	11	150		µg/L	50	3/8/2016 1:56:49 PM	R32660
2-Chlorotoluene	ND	20	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
4-Chlorotoluene	ND	6.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
cis-1,2-DCE	ND	6.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
cis-1,3-Dichloropropene	ND	5.0	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2-Dibromo-3-chloropropane	ND	7.7	100		µg/L	50	3/8/2016 1:56:49 PM	R32660
Dibromochloromethane	ND	4.3	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Dibromomethane	ND	6.0	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2-Dichlorobenzene	ND	20	50		µg/L	50	3/8/2016 1:56:49 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-20

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 9:05:00 AM

Lab ID: 1603152-002

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,3-Dichlorobenzene	ND	7.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,4-Dichlorobenzene	ND	7.1	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Dichlorodifluoromethane	ND	16	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1-Dichloroethane	ND	5.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1-Dichloroethene	ND	3.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2-Dichloropropane	ND	2.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,3-Dichloropropane	ND	7.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
2,2-Dichloropropane	ND	6.0	100		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1-Dichloropropene	ND	6.7	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Hexachlorobutadiene	ND	9.9	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
2-Hexanone	53	18	500	J	µg/L	50	3/8/2016 1:56:49 PM	R32660
Isopropylbenzene	18	4.9	50	J	µg/L	50	3/8/2016 1:56:49 PM	R32660
4-Isopropyltoluene	ND	7.0	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
4-Methyl-2-pentanone	ND	7.5	500		µg/L	50	3/8/2016 1:56:49 PM	R32660
Methylene Chloride	9.9	3.1	150	J	µg/L	50	3/8/2016 1:56:49 PM	R32660
n-Butylbenzene	11	8.0	150	J	µg/L	50	3/8/2016 1:56:49 PM	R32660
n-Propylbenzene	73	6.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
sec-Butylbenzene	ND	5.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Styrene	ND	4.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
tert-Butylbenzene	ND	4.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1,1,2-Tetrachloroethane	ND	5.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1,2,2-Tetrachloroethane	ND	5.3	100		µg/L	50	3/8/2016 1:56:49 PM	R32660
Tetrachloroethene (PCE)	ND	7.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
trans-1,2-DCE	ND	20	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
trans-1,3-Dichloropropene	ND	4.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2,3-Trichlorobenzene	ND	5.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2,4-Trichlorobenzene	ND	6.6	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1,1-Trichloroethane	ND	3.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,1,2-Trichloroethane	ND	3.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Trichloroethene (TCE)	ND	8.8	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Trichlorofluoromethane	ND	4.4	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
1,2,3-Trichloropropane	ND	5.6	100		µg/L	50	3/8/2016 1:56:49 PM	R32660
Vinyl chloride	ND	3.2	50		µg/L	50	3/8/2016 1:56:49 PM	R32660
Xylenes, Total	9200	16	75		µg/L	50	3/8/2016 1:56:49 PM	R32660
Surr: 1,2-Dichloroethane-d4	95.4	0	70-130		%Rec	50	3/8/2016 1:56:49 PM	R32660
Surr: 4-Bromofluorobenzene	109	0	70-130		%Rec	50	3/8/2016 1:56:49 PM	R32660
Surr: Dibromofluoromethane	94.5	0	70-130		%Rec	50	3/8/2016 1:56:49 PM	R32660
Surr: Toluene-d8	98.6	0	70-130		%Rec	50	3/8/2016 1:56:49 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 11:00:00 AM

Lab ID: 1603152-003

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	3/7/2016 2:00:12 PM	24101
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/7/2016 2:00:12 PM	24101
Surr: DNOP	92.5	0	70-141		%Rec	1	3/7/2016 2:00:12 PM	24101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	3/4/2016 3:15:10 PM	A32596
Surr: BFB	90.2	0	49.5-130		%Rec	1	3/4/2016 3:15:10 PM	A32596
EPA METHOD 300.0: ANIONS							Analyst: JRR	
Fluoride	0.38	0.11	0.50	J	mg/L	5	3/4/2016 4:30:18 PM	R32618
Chloride	110	0.55	10		mg/L	20	3/4/2016 4:42:43 PM	R32618
Bromide	1.8	0.16	0.50		mg/L	5	3/4/2016 4:30:18 PM	R32618
Phosphorus, Orthophosphate (As P)	ND	1.1	2.5	H	mg/L	5	3/4/2016 4:30:18 PM	R32618
Sulfate	110	0.32	2.5		mg/L	5	3/4/2016 4:30:18 PM	R32618
Nitrate+Nitrite as N	14	0.42	1.0	*	mg/L	5	3/14/2016 7:12:55 PM	R32788
EPA METHOD 200.7: DISSOLVED METALS							Analyst: MED	
Calcium	99	0.26	1.0		mg/L	1	3/16/2016 3:33:05 PM	C32831
Magnesium	18	0.013	1.0		mg/L	1	3/16/2016 3:33:05 PM	C32831
Potassium	0.34	0.18	1.0	J	mg/L	1	3/16/2016 3:33:05 PM	C32831
Sodium	330	0.48	5.0		mg/L	5	3/18/2016 1:09:33 PM	B32891
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Toluene	ND	0.089	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Ethylbenzene	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Methyl tert-butyl ether (MTBE)	0.32	0.21	1.0	J	µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Naphthalene	ND	0.083	2.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Acetone	ND	0.88	10		µg/L	1	3/8/2016 2:53:39 PM	R32660
Bromobenzene	ND	0.080	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Bromodichloromethane	ND	0.098	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Bromoform	ND	0.10	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Bromomethane	ND	0.78	3.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
2-Butanone	ND	0.32	10		µg/L	1	3/8/2016 2:53:39 PM	R32660
Carbon disulfide	ND	0.60	10		µg/L	1	3/8/2016 2:53:39 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-1

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 11:00:00 AM

Lab ID: 1603152-003

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Chlorobenzene	ND	0.10	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Chloroethane	ND	0.15	2.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Chloroform	ND	0.089	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Chloromethane	ND	0.21	3.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Dibromochloromethane	ND	0.087	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Dibromomethane	ND	0.12	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
2-Hexanone	ND	0.36	10		µg/L	1	3/8/2016 2:53:39 PM	R32660
Isopropylbenzene	ND	0.098	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	3/8/2016 2:53:39 PM	R32660
Methylene Chloride	ND	0.063	3.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
n-Butylbenzene	ND	0.16	3.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
n-Propylbenzene	ND	0.13	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Styrene	ND	0.095	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** NAPIS-1**Project:** Quarterly GW Sampling**Collection Date:** 3/1/2016 11:00:00 AM**Lab ID:** 1603152-003**Matrix:** AQUEOUS**Received Date:** 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Vinyl chloride	ND	0.063	1.0		µg/L	1	3/8/2016 2:53:39 PM	R32660
Xylenes, Total	ND	0.32	1.5		µg/L	1	3/8/2016 2:53:39 PM	R32660
Surr: 1,2-Dichloroethane-d4	101	0	70-130		%Rec	1	3/8/2016 2:53:39 PM	R32660
Surr: 4-Bromofluorobenzene	111	0	70-130		%Rec	1	3/8/2016 2:53:39 PM	R32660
Surr: Dibromofluoromethane	100	0	70-130		%Rec	1	3/8/2016 2:53:39 PM	R32660
Surr: Toluene-d8	99.2	0	70-130		%Rec	1	3/8/2016 2:53:39 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 12:00:00 PM

Lab ID: 1603152-004

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	3/7/2016 2:21:55 PM	24101
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/7/2016 2:21:55 PM	24101
Surr: DNOP	90.2	0	70-141		%Rec	1	3/7/2016 2:21:55 PM	24101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	0.38	0.025	0.050		mg/L	1	3/4/2016 3:39:42 PM	A32596
Surr: BFB	126	0	49.5-130		%Rec	1	3/4/2016 3:39:42 PM	A32596
EPA METHOD 300.0: ANIONS							Analyst: JRR	
Fluoride	1.6	0.11	0.50		mg/L	5	3/4/2016 4:55:08 PM	R32618
Chloride	330	0.55	10		mg/L	20	3/4/2016 5:07:33 PM	R32618
Bromide	2.2	0.16	0.50		mg/L	5	3/4/2016 4:55:08 PM	R32618
Phosphorus, Orthophosphate (As P)	ND	1.1	2.5	H	mg/L	5	3/4/2016 4:55:08 PM	R32618
Sulfate	18	0.32	2.5		mg/L	5	3/4/2016 4:55:08 PM	R32618
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	3/14/2016 8:02:33 PM	R32788
EPA METHOD 200.7: DISSOLVED METALS							Analyst: MED	
Calcium	89	0.26	1.0		mg/L	1	3/16/2016 3:34:59 PM	C32831
Magnesium	17	0.013	1.0		mg/L	1	3/16/2016 3:34:59 PM	C32831
Potassium	0.56	0.18	1.0	J	mg/L	1	3/16/2016 3:34:59 PM	C32831
Sodium	390	0.48	5.0		mg/L	5	3/18/2016 1:11:27 PM	B32891
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Toluene	ND	0.089	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Ethylbenzene	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Naphthalene	ND	0.083	2.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Acetone	ND	0.88	10		µg/L	1	3/8/2016 3:21:55 PM	R32660
Bromobenzene	ND	0.080	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Bromodichloromethane	ND	0.098	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Bromoform	ND	0.10	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Bromomethane	ND	0.78	3.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
2-Butanone	ND	0.32	10		µg/L	1	3/8/2016 3:21:55 PM	R32660
Carbon disulfide	ND	0.60	10		µg/L	1	3/8/2016 3:21:55 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 12:00:00 PM

Lab ID: 1603152-004

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Chlorobenzene	ND	0.10	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Chloroethane	ND	0.15	2.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Chloroform	ND	0.089	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Chloromethane	ND	0.21	3.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Dibromochloromethane	ND	0.087	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Dibromomethane	ND	0.12	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
2-Hexanone	ND	0.36	10		µg/L	1	3/8/2016 3:21:55 PM	R32660
Isopropylbenzene	ND	0.098	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	3/8/2016 3:21:55 PM	R32660
Methylene Chloride	ND	0.063	3.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
n-Butylbenzene	ND	0.16	3.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
n-Propylbenzene	ND	0.13	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Styrene	ND	0.095	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-2

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 12:00:00 PM

Lab ID: 1603152-004

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Vinyl chloride	ND	0.063	1.0		µg/L	1	3/8/2016 3:21:55 PM	R32660
Xylenes, Total	ND	0.32	1.5		µg/L	1	3/8/2016 3:21:55 PM	R32660
Surr: 1,2-Dichloroethane-d4	95.9	0	70-130		%Rec	1	3/8/2016 3:21:55 PM	R32660
Surr: 4-Bromofluorobenzene	108	0	70-130		%Rec	1	3/8/2016 3:21:55 PM	R32660
Surr: Dibromofluoromethane	99.7	0	70-130		%Rec	1	3/8/2016 3:21:55 PM	R32660
Surr: Toluene-d8	96.7	0	70-130		%Rec	1	3/8/2016 3:21:55 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 12:45:00 PM

Lab ID: 1603152-005

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	3/7/2016 2:43:47 PM	24101
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	3/7/2016 2:43:47 PM	24101
Surr: DNOP	92.3	0	70-141		%Rec	1	3/7/2016 2:43:47 PM	24101
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	3/4/2016 4:04:12 PM	A32596
Surr: BFB	89.3	0	49.5-130		%Rec	1	3/4/2016 4:04:12 PM	A32596
EPA METHOD 300.0: ANIONS							Analyst: JRR	
Fluoride	0.53	0.023	0.10		mg/L	1	3/4/2016 5:19:58 PM	R32618
Chloride	850	2.7	50		mg/L	100	3/15/2016 9:23:06 PM	R32822
Bromide	6.4	0.032	0.10		mg/L	1	3/4/2016 5:19:58 PM	R32618
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	3/4/2016 5:19:58 PM	R32618
Sulfate	350	1.3	10		mg/L	20	3/4/2016 5:32:22 PM	R32618
Nitrate+Nitrite as N	14	0.42	1.0	*	mg/L	5	3/14/2016 8:14:58 PM	R32788
EPA METHOD 200.7: DISSOLVED METALS							Analyst: MED	
Calcium	35	0.26	1.0		mg/L	1	3/16/2016 3:36:44 PM	C32831
Magnesium	5.3	0.013	1.0		mg/L	1	3/16/2016 3:36:44 PM	C32831
Potassium	3.4	0.18	1.0		mg/L	1	3/16/2016 3:36:44 PM	C32831
Sodium	850	0.96	10		mg/L	10	3/18/2016 1:13:23 PM	B32891
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	13	0.096	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Toluene	0.23	0.089	1.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
Ethylbenzene	5.3	0.11	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Methyl tert-butyl ether (MTBE)	160	0.21	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Naphthalene	0.55	0.083	2.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
1-Methylnaphthalene	2.1	0.20	4.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Acetone	ND	0.88	10		µg/L	1	3/8/2016 3:50:07 PM	R32660
Bromobenzene	ND	0.080	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Bromodichloromethane	ND	0.098	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Bromoform	ND	0.10	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Bromomethane	ND	0.78	3.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
2-Butanone	ND	0.32	10		µg/L	1	3/8/2016 3:50:07 PM	R32660
Carbon disulfide	ND	0.60	10		µg/L	1	3/8/2016 3:50:07 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: NAPIS-3

Project: Quarterly GW Sampling

Collection Date: 3/1/2016 12:45:00 PM

Lab ID: 1603152-005

Matrix: AQUEOUS

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Chlorobenzene	ND	0.10	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Chloroethane	ND	0.15	2.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Chloroform	ND	0.089	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Chloromethane	ND	0.21	3.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Dibromochloromethane	ND	0.087	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Dibromomethane	ND	0.12	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1-Dichloroethane	0.47	0.11	1.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1-Dichloroethene	0.16	0.076	1.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
2-Hexanone	ND	0.36	10		µg/L	1	3/8/2016 3:50:07 PM	R32660
Isopropylbenzene	0.85	0.098	1.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	3/8/2016 3:50:07 PM	R32660
Methylene Chloride	ND	0.063	3.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
n-Butylbenzene	0.21	0.16	3.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
n-Propylbenzene	1.0	0.13	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
sec-Butylbenzene	0.39	0.11	1.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
Styrene	ND	0.095	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
tert-Butylbenzene	0.11	0.096	1.0	J	µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Western Refining Southwest, Gallup**Client Sample ID:** NAPIS-3**Project:** Quarterly GW Sampling**Collection Date:** 3/1/2016 12:45:00 PM**Lab ID:** 1603152-005**Matrix:** AQUEOUS**Received Date:** 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Vinyl chloride	ND	0.063	1.0		µg/L	1	3/8/2016 3:50:07 PM	R32660
Xylenes, Total	ND	0.32	1.5		µg/L	1	3/8/2016 3:50:07 PM	R32660
Surr: 1,2-Dichloroethane-d4	101	0	70-130		%Rec	1	3/8/2016 3:50:07 PM	R32660
Surr: 4-Bromofluorobenzene	110	0	70-130		%Rec	1	3/8/2016 3:50:07 PM	R32660
Surr: Dibromofluoromethane	98.7	0	70-130		%Rec	1	3/8/2016 3:50:07 PM	R32660
Surr: Toluene-d8	99.5	0	70-130		%Rec	1	3/8/2016 3:50:07 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1603152-006

Matrix: TRIP BLANK

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	3/4/2016 4:28:43 PM	A32596
Surr: BFB	86.7	0	49.5-130		%Rec	1	3/4/2016 4:28:43 PM	A32596
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Toluene	ND	0.089	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Ethylbenzene	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Naphthalene	ND	0.083	2.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Acetone	ND	0.88	10		µg/L	1	3/8/2016 7:36:21 PM	R32660
Bromobenzene	ND	0.080	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Bromodichloromethane	ND	0.098	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Bromoform	ND	0.10	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Bromomethane	ND	0.78	3.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
2-Butanone	ND	0.32	10		µg/L	1	3/8/2016 7:36:21 PM	R32660
Carbon disulfide	ND	0.60	10		µg/L	1	3/8/2016 7:36:21 PM	R32660
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Chlorobenzene	ND	0.10	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Chloroethane	ND	0.15	2.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Chloroform	ND	0.089	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Chloromethane	ND	0.21	3.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Dibromochloromethane	ND	0.087	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Dibromomethane	ND	0.12	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1603152

Date Reported: 4/4/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1603152-006

Matrix: TRIP BLANK

Received Date: 3/2/2016 4:16:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
2-Hexanone	ND	0.36	10		µg/L	1	3/8/2016 7:36:21 PM	R32660
Isopropylbenzene	ND	0.098	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	3/8/2016 7:36:21 PM	R32660
Methylene Chloride	ND	0.063	3.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
n-Butylbenzene	ND	0.16	3.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
n-Propylbenzene	ND	0.13	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Styrene	ND	0.095	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Vinyl chloride	ND	0.063	1.0		µg/L	1	3/8/2016 7:36:21 PM	R32660
Xylenes, Total	ND	0.32	1.5		µg/L	1	3/8/2016 7:36:21 PM	R32660
Surr: 1,2-Dichloroethane-d4	92.8	0	70-130		%Rec	1	3/8/2016 7:36:21 PM	R32660
Surr: 4-Bromofluorobenzene	106	0	70-130		%Rec	1	3/8/2016 7:36:21 PM	R32660
Surr: Dibromofluoromethane	90.0	0	70-130		%Rec	1	3/8/2016 7:36:21 PM	R32660
Surr: Toluene-d8	95.6	0	70-130		%Rec	1	3/8/2016 7:36:21 PM	R32660

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB-C	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: C32831			RunNo: 32831					
Prep Date:		Analysis Date: 3/16/2016			SeqNo: 1006189		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								

Sample ID	LCS-C		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: C32831		RunNo: 32831					
Prep Date:			Analysis Date: 3/16/2016		SeqNo: 1006190		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	101	85	115			
Magnesium	50	1.0	50.00	0	100	85	115			
Potassium	49	1.0	50.00	0	97.4	85	115			

Sample ID	LLLCS-C	SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC	Batch ID: C32831			RunNo: 32831					
Prep Date:		Analysis Date: 3/16/2016			SeqNo: 1006191		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.53	1.0	0.5000	0	107	50	150			J
Magnesium	0.52	1.0	0.5000	0	104	50	150			J
Potassium	0.55	1.0	0.5000	0	110	50	150			J

Sample ID	MB-B		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals				
Client ID:	PBW		Batch ID:	B32891		RunNo:	32891				
Prep Date:			Analysis Date:	3/18/2016		SeqNo:	1008295	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Sodium	ND	1.0									

Sample ID	LCS-B		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: B32891		RunNo: 32891					
Prep Date:			Analysis Date: 3/18/2016		SeqNo: 1008299		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	50	1.0	50.00	0	99.0	85	115			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	LLLCS-B		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: B32891		RunNo: 32891					
Prep Date:			Analysis Date: 3/18/2016		SeqNo: 1008300		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	0.54	1.0	0.5000	0	108	50	150			J

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R32618			RunNo: 32618						
Prep Date:	Analysis Date: 3/4/2016			SeqNo: 997926		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: R32618			RunNo: 32618						
Prep Date:	Analysis Date: 3/4/2016			SeqNo: 997927		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	4.7	0.50	5.000	0	94.9	90	110			
Bromide	2.4	0.10	2.500	0	96.2	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	95.5	90	110			
Sulfate	9.7	0.50	10.00	0	97.3	90	110			

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R32788			RunNo: 32788						
Prep Date:	Analysis Date: 3/14/2016			SeqNo: 1004671		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: R32788			RunNo: 32788						
Prep Date:	Analysis Date: 3/14/2016			SeqNo: 1004672		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	94.6	90	110			

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R32822			RunNo: 32822						
Prep Date:	Analysis Date: 3/15/2016			SeqNo: 1005748		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R32822		RunNo: 32822					
Prep Date:			Analysis Date: 3/15/2016		SeqNo: 1005749		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	93.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	LCS-24101		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 24101		RunNo: 32603					
Prep Date:	3/7/2016		Analysis Date: 3/7/2016		SeqNo: 997914		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.9	1.0	5.000	0	118	71.3	139			
Surr: DNOP	0.50		0.5000		99.7	70	141			

Sample ID	MB-24101		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 24101		RunNo: 32603					
Prep Date:	3/7/2016		Analysis Date: 3/7/2016		SeqNo: 997915		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.91		1.000		90.8	70	141			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A32596	RunNo:	32596					
Prep Date:		Analysis Date:	3/4/2016	SeqNo:	997207	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		95.0	49.5	130			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A32596	RunNo:	32596					
Prep Date:		Analysis Date:	3/4/2016	SeqNo:	997208	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	103	80	120			
Surr: BFB	21		20.00		106	49.5	130			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R32660			RunNo: 32660					
Prep Date:		Analysis Date: 3/8/2016			SeqNo: 999254		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.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
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W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R32660			RunNo: 32660						
Prep Date:	Analysis Date: 3/8/2016			SeqNo: 999254		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	0.19	3.0								J
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.2	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.2	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID 100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batch ID: R32660			RunNo: 32660						
Prep Date:	Analysis Date: 3/8/2016			SeqNo: 999255		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	22	1.0	20.00	0	111	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID 100ng lcs	SampType: LCS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R32660		RunNo: 32660							
Prep Date:	Analysis Date: 3/8/2016		SeqNo: 999255		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		113	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.6	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

Sample ID 1603152-001a ms	SampType: MS		TestCode: EPA Method 8260B: VOLATILES							
Client ID: MKTF-21	Batch ID: R32660		RunNo: 32660							
Prep Date:	Analysis Date: 3/8/2016		SeqNo: 999260		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5000	10	200.0	4993	19.4	70	130			ES
Toluene	520	10	200.0	341.6	89.1	70	130			
Chlorobenzene	210	10	200.0	0	103	70	130			
1,1-Dichloroethene	200	10	200.0	0	98.6	70	130			
Trichloroethene (TCE)	190	10	200.0	0	96.1	70	130			
Surr: 1,2-Dichloroethane-d4	96		100.0		96.1	70	130			
Surr: 4-Bromofluorobenzene	110		100.0		111	70	130			
Surr: Dibromofluoromethane	97		100.0		97.4	70	130			
Surr: Toluene-d8	100		100.0		103	70	130			

Sample ID 1603152-001a msd	SampType: MSD		TestCode: EPA Method 8260B: VOLATILES							
Client ID: MKTF-21	Batch ID: R32660		RunNo: 32660							
Prep Date:	Analysis Date: 3/8/2016		SeqNo: 999261		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4600	10	200.0	4993	-192	70	130	8.79	20	ES
Toluene	500	10	200.0	341.6	81.5	70	130	2.97	20	
Chlorobenzene	200	10	200.0	0	102	70	130	0.973	20	
1,1-Dichloroethene	180	10	200.0	0	90.2	70	130	8.97	20	
Trichloroethene (TCE)	170	10	200.0	0	84.3	70	130	13.1	20	
Surr: 1,2-Dichloroethane-d4	91		100.0		90.8	70	130	0	0	
Surr: 4-Bromofluorobenzene	110		100.0		109	70	130	0	0	
Surr: Dibromofluoromethane	90		100.0		89.8	70	130	0	0	
Surr: Toluene-d8	98		100.0		98.4	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	mb-24121		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 24121		RunNo: 32760					
Prep Date:	3/8/2016		Analysis Date: 3/13/2016		SeqNo: 1003941		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.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	mb-24121		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 24121		RunNo: 32760					
Prep Date:	3/8/2016		Analysis Date: 3/13/2016		SeqNo: 1003941		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	250		200.0		123	4.63	113			S
Surr: Phenol-d5	260		200.0		131	4.13	124			S
Surr: 2,4,6-Tribromophenol	230		200.0		116	5.14	132			
Surr: Nitrobenzene-d5	130		100.0		128	9.13	140			
Surr: 2-Fluorobiphenyl	120		100.0		118	10.8	132			
Surr: 4-Terphenyl-d14	130		100.0		131	12.9	107			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603152

04-Apr-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	Ics-24121		SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	LCSW		Batch ID: 24121			RunNo: 32760				
Prep Date:	3/8/2016		Analysis Date: 3/13/2016			SeqNo: 1003943		Units: µg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	100	10	100.0	0	104	40.2	107			
4-Chloro-3-methylphenol	250	10	200.0	0	125	48.2	107			S
2-Chlorophenol	220	10	200.0	0	110	42.5	106			S
1,4-Dichlorobenzene	110	10	100.0	0	109	31.6	111			
2,4-Dinitrotoluene	78	10	100.0	0	78.1	33.6	86.5			
N-Nitrosodi-n-propylamine	110	10	100.0	0	108	44	106			S
4-Nitrophenol	180	10	200.0	0	88.4	25.5	109			
Pentachlorophenol	170	20	200.0	0	84.6	38.8	97.8			
Phenol	210	10	200.0	0	107	22.7	116			
Pyrene	100	10	100.0	0	103	29.3	138			
1,2,4-Trichlorobenzene	110	10	100.0	0	115	35.3	123			
Surr: 2-Fluorophenol	180		200.0		88.4	4.63	113			
Surr: Phenol-d5	200		200.0		101	4.13	124			
Surr: 2,4,6-Tribromophenol	230		200.0		113	5.14	132			
Surr: Nitrobenzene-d5	96		100.0		96.0	9.13	140			
Surr: 2-Fluorobiphenyl	90		100.0		90.5	10.8	132			
Surr: 4-Terphenyl-d14	99		100.0		99.4	12.9	107			

Qualifiers:

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



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3973 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1603152

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

3/2/2016 4:16:00 PM

Completed By: Ashley Gallegos

3/3/2016 9:14:40 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 5.0°C ?

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

6

(≤ 2 or >12 unless noted)

Adjusted?

No

Checked by:

as/24

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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

Chain-of-Custody Record

Client: EASTERN REFINING SW, INC.
 Address: ALLUP REFINERY
2 GIANT CROSSING ROAD
ALLUP, NM 87301
 Phone #: 505-722-0231
 Mail or Fax #: CHERYL L. JOHNSON
WNR.COM
 /QC Package: Level 4 (Full Validation)
 Standard ☒ Level 4 (Full Validation)
 creditation
 NELAP ☐ Other ☐
 EDD (Type) EXCEL

Turn-Around Time:

☒ Standard ☐ Rush
 Project Name: QUARTERLY GWSAMPLING
 Project #:

Project Manager:

CHERYL JOHNSON
 Sampler: TRACY PAYNE
 On Ice: ☒ Yes ☐ No
 Sample Temperature: 10

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
1/16	0840	WATER	MKTF-21	40 mL VOA-6	HCL	-001
↓	↓	↓	↓	1 LITER AMBER-1	NEAT	
↓	↓	↓	↓	250 mL AMBER-1	NEAT	
1/16	0905	WATER	MKTF-20	40 mL VOA-6	HCL	-002
↓	↓	↓	↓	1 LITER AMBER-1	NEAT	
↓	↓	↓	↓	250 mL AMBER-1	NEAT	
1/16	1100	WATER	NAPIS-1	40 mL VOA-6	HCL	-003
↓	↓	↓	↓	250 mL AMBER-1	NEAT	
↓	↓	↓	↓	125 mL PLASTIC-1	HNO3	
↓	↓	↓	↓	125 mL PLASTIC-1	H2SO4	
↓	↓	↓	↓	500 mL PLASTIC-1	NEAT	

Relinquished by: [Signature] Date: 1/16/10
 Relinquished by: [Signature] Date: 1/16/10
 Relinquished by: [Signature] Date: 1/16/10



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	MATRIX / ANIONS	Air Bubbles (Y or N)
		✓							✓	✓		
		✓							✓			
		✓							✓			
		✓							✓			
		✓									✓	
		✓									✓	
		✓									✓	

Remarks:

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

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



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

March 31, 2016

Cheryl Johnson

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

RE: Quarterly GW Sampling

OrderNo.: 1602A10

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/23/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 1:10:00 PM

Lab ID: 1602A10-001

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	1.5	0.69	1.0		mg/L	1	2/26/2016 9:49:41 AM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/26/2016 9:49:41 AM	23932
Surr: DNOP	141	0	70-141		%Rec	1	2/26/2016 9:49:41 AM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	29	0.25	0.50		mg/L	10	2/25/2016 12:28:17 PM	R32416
Surr: BFB	122	0	49.5-130		%Rec	10	2/25/2016 12:28:17 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.058	0.023	0.10	J	mg/L	1	2/26/2016 12:37:44 AM	R32424
Chloride	650	1.4	25		mg/L	50	3/1/2016 10:27:42 PM	A32498
Bromide	1.0	0.032	0.10		mg/L	1	2/26/2016 12:37:44 AM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/26/2016 12:37:44 AM	R32424
Sulfate	50	1.3	10		mg/L	20	2/26/2016 12:50:09 AM	R32424
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	2/29/2016 1:07:06 PM	R32480
EPA METHOD 200.7: DISSOLVED METALS							Analyst: MED	
Barium	0.25	0.0013	0.0020		mg/L	1	3/1/2016 11:43:57 AM	B32475
Cadmium	ND	0.00075	0.0020		mg/L	1	3/1/2016 11:43:57 AM	B32475
Calcium	130	1.3	5.0		mg/L	5	3/1/2016 11:47:45 AM	B32475
Chromium	ND	0.0018	0.0060		mg/L	1	3/1/2016 11:43:57 AM	B32475
Copper	ND	0.0040	0.0060		mg/L	1	3/1/2016 11:43:57 AM	B32475
Iron	0.21	0.0091	0.020		mg/L	1	3/1/2016 11:43:57 AM	B32475
Magnesium	20	0.013	1.0		mg/L	1	3/1/2016 11:43:57 AM	B32475
Manganese	1.9	0.0016	0.010	*	mg/L	5	3/1/2016 11:47:45 AM	B32475
Potassium	2.6	0.18	1.0		mg/L	1	3/1/2016 11:43:57 AM	B32475
Silver	ND	0.0028	0.0050		mg/L	1	3/1/2016 11:43:57 AM	B32475
Sodium	500	0.48	5.0		mg/L	5	3/1/2016 11:47:45 AM	B32475
Zinc	0.012	0.0028	0.010		mg/L	1	3/2/2016 3:31:43 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.51	0.0011	0.0020		mg/L	1	3/2/2016 2:39:22 PM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/1/2016 11:18:15 AM	23939
Chromium	0.0059	0.0022	0.0060	J	mg/L	1	3/1/2016 11:18:15 AM	23939
Copper	0.0086	0.0051	0.0060		mg/L	1	3/1/2016 11:18:15 AM	23939
Iron	5.2	0.072	0.20	*	mg/L	10	3/2/2016 2:59:59 PM	23939
Manganese	2.3	0.0076	0.010	*	mg/L	5	3/2/2016 2:54:19 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/2/2016 2:39:22 PM	23939
Zinc	0.018	0.0039	0.010		mg/L	1	3/7/2016 1:38:03 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0026	0.000065	0.0010		mg/L	1	3/8/2016 3:34:14 PM	C32643

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	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.0012	0.000026	0.00050		mg/L	1	3/8/2016 3:34:14 PM	C32643
Selenium	0.0031	0.00097	0.0050	J	mg/L	5	3/10/2016 4:27:44 PM	B32730
Uranium	0.023	0.0000048	0.00050		mg/L	1	3/8/2016 3:34:14 PM	C32643
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0028	0.00029	0.0010		mg/L	1	3/9/2016 2:17:00 PM	24075
Lead	0.013	0.000047	0.00050		mg/L	1	3/9/2016 2:17:00 PM	24075
Selenium	0.0028	0.00062	0.0050	J	mg/L	5	3/9/2016 3:23:20 PM	24075
Uranium	0.024	0.000025	0.0025		mg/L	5	3/9/2016 3:23:20 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.00013	0.000053	0.00020	J	mg/L	1	2/26/2016 12:31:44 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 1:12:26 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 1:12:26 PM	23981

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EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 1:12:26 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 1:12:26 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 1:12:26 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 1:12:26 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 1:12:26 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
3+4-Methylphenol	12	7.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Naphthalene	7.2	5.9	10	J	µg/L	1	3/2/2016 1:12:26 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 1:12:26 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 1:12:26 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 1:12:26 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 1:12:26 PM	23981

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EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 1:12:26 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 1:12:26 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 1:12:26 PM	23981
Surr: 2-Fluorophenol	38.3	0	4.63-113		%Rec	1	3/2/2016 1:12:26 PM	23981
Surr: Phenol-d5	28.2	0	4.13-124		%Rec	1	3/2/2016 1:12:26 PM	23981
Surr: 2,4,6-Tribromophenol	59.0	0	5.14-132		%Rec	1	3/2/2016 1:12:26 PM	23981
Surr: Nitrobenzene-d5	59.6	0	9.13-140		%Rec	1	3/2/2016 1:12:26 PM	23981
Surr: 2-Fluorobiphenyl	63.3	0	10.8-132		%Rec	1	3/2/2016 1:12:26 PM	23981
Surr: 4-Terphenyl-d14	96.5	0	12.9-107		%Rec	1	3/2/2016 1:12:26 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	5600	19	200		µg/L	200	2/25/2016 4:42:31 PM	R32418
Toluene	27	1.8	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Ethylbenzene	310	2.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Methyl tert-butyl ether (MTBE)	210	4.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2,4-Trimethylbenzene	7.2	2.1	20	J	µg/L	20	2/25/2016 5:10:54 PM	R32418
1,3,5-Trimethylbenzene	ND	2.3	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2-Dichloroethane (EDC)	8.1	1.1	20	J	µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2-Dibromoethane (EDB)	ND	2.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Naphthalene	14	1.7	40	J	µg/L	20	2/25/2016 5:10:54 PM	R32418
1-Methylnaphthalene	11	4.1	80	J	µg/L	20	2/25/2016 5:10:54 PM	R32418
2-Methylnaphthalene	ND	3.2	80		µg/L	20	2/25/2016 5:10:54 PM	R32418
Acetone	ND	18	200		µg/L	20	2/25/2016 5:10:54 PM	R32418
Bromobenzene	ND	1.6	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Bromodichloromethane	ND	2.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Bromoform	ND	2.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Bromomethane	ND	16	60		µg/L	20	2/25/2016 5:10:54 PM	R32418
2-Butanone	ND	6.4	200		µg/L	20	2/25/2016 5:10:54 PM	R32418
Carbon disulfide	ND	12	200		µg/L	20	2/25/2016 5:10:54 PM	R32418
Carbon Tetrachloride	ND	2.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Chlorobenzene	ND	2.1	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Chloroethane	ND	2.9	40		µg/L	20	2/25/2016 5:10:54 PM	R32418
Chloroform	ND	1.8	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Chloromethane	ND	4.3	60		µg/L	20	2/25/2016 5:10:54 PM	R32418
2-Chlorotoluene	ND	8.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
4-Chlorotoluene	ND	2.6	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
cis-1,2-DCE	32	2.5	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
cis-1,3-Dichloropropene	ND	2.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418

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EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	3.1	40		µg/L	20	2/25/2016 5:10:54 PM	R32418
Dibromochloromethane	ND	1.7	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Dibromomethane	ND	2.4	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2-Dichlorobenzene	ND	8.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,3-Dichlorobenzene	ND	2.9	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,4-Dichlorobenzene	ND	2.9	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Dichlorodifluoromethane	ND	6.5	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1-Dichloroethane	93	2.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1-Dichloroethene	51	1.5	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2-Dichloropropane	ND	0.94	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,3-Dichloropropane	ND	3.1	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
2,2-Dichloropropane	ND	2.4	40		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1-Dichloropropene	ND	2.7	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Hexachlorobutadiene	ND	4.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
2-Hexanone	ND	7.2	200		µg/L	20	2/25/2016 5:10:54 PM	R32418
Isopropylbenzene	37	2.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
4-Isopropyltoluene	ND	2.8	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
4-Methyl-2-pentanone	ND	3.0	200		µg/L	20	2/25/2016 5:10:54 PM	R32418
Methylene Chloride	ND	1.3	60		µg/L	20	2/25/2016 5:10:54 PM	R32418
n-Butylbenzene	14	3.2	60	J	µg/L	20	2/25/2016 5:10:54 PM	R32418
n-Propylbenzene	94	2.6	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
sec-Butylbenzene	ND	2.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Styrene	ND	1.9	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
tert-Butylbenzene	ND	1.9	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1,1,2-Tetrachloroethane	ND	2.2	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1,2,2-Tetrachloroethane	ND	2.1	40		µg/L	20	2/25/2016 5:10:54 PM	R32418
Tetrachloroethene (PCE)	ND	3.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
trans-1,2-DCE	ND	8.0	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
trans-1,3-Dichloropropene	ND	1.7	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2,3-Trichlorobenzene	ND	2.3	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2,4-Trichlorobenzene	ND	2.7	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1,1-Trichloroethane	ND	1.3	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,1,2-Trichloroethane	ND	1.5	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Trichloroethene (TCE)	ND	3.5	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Trichlorofluoromethane	ND	1.8	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
1,2,3-Trichloropropane	ND	2.2	40		µg/L	20	2/25/2016 5:10:54 PM	R32418
Vinyl chloride	ND	1.3	20		µg/L	20	2/25/2016 5:10:54 PM	R32418
Xylenes, Total	8.8	6.5	30	J	µg/L	20	2/25/2016 5:10:54 PM	R32418
Surr: 1,2-Dichloroethane-d4	94.0	0	70-130		%Rec	20	2/25/2016 5:10:54 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-24

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 1:10:00 PM

Lab ID: 1602A10-001

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	20	2/25/2016 5:10:54 PM	R32418
Surr: Dibromofluoromethane	96.2	0	70-130		%Rec	20	2/25/2016 5:10:54 PM	R32418
Surr: Toluene-d8	105	0	70-130		%Rec	20	2/25/2016 5:10:54 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 2:35:00 PM

Lab ID: 1602A10-002

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	2/25/2016 6:08:24 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/25/2016 6:08:24 PM	23932
Surr: DNOP	119	0	70-141		%Rec	1	2/25/2016 6:08:24 PM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	1.5	0.13	0.25		mg/L	5	2/25/2016 2:07:25 PM	R32416
Surr: BFB	89.6	0	49.5-130		%Rec	5	2/25/2016 2:07:25 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.20	0.023	0.10		mg/L	1	2/26/2016 1:27:23 AM	R32424
Chloride	2000	5.5	100		mg/L	200	3/1/2016 10:40:06 PM	A32498
Bromide	2.9	0.65	2.0		mg/L	20	2/26/2016 1:39:47 AM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/26/2016 1:27:23 AM	R32424
Sulfate	210	1.3	10		mg/L	20	2/26/2016 1:39:47 AM	R32424
Nitrate+Nitrite as N	11	0.84	2.0	*	mg/L	10	3/1/2016 11:04:55 PM	A32498
EPA METHOD 200.7: DISSOLVED METALS							Analyst: MED	
Barium	0.12	0.0013	0.0020		mg/L	1	3/1/2016 11:49:43 AM	B32475
Cadmium	ND	0.00075	0.0020		mg/L	1	3/1/2016 11:49:43 AM	B32475
Calcium	110	1.3	5.0		mg/L	5	3/1/2016 11:53:42 AM	B32475
Chromium	ND	0.0018	0.0060		mg/L	1	3/1/2016 11:49:43 AM	B32475
Copper	ND	0.0040	0.0060		mg/L	1	3/1/2016 11:49:43 AM	B32475
Iron	0.38	0.0091	0.020	*	mg/L	1	3/1/2016 11:49:43 AM	B32475
Magnesium	17	0.013	1.0		mg/L	1	3/1/2016 11:49:43 AM	B32475
Manganese	0.91	0.00032	0.0020	*	mg/L	1	3/1/2016 11:49:43 AM	B32475
Potassium	2.2	0.18	1.0		mg/L	1	3/1/2016 11:49:43 AM	B32475
Silver	ND	0.0028	0.0050		mg/L	1	3/1/2016 11:49:43 AM	B32475
Sodium	680	0.96	10		mg/L	10	3/2/2016 3:35:28 PM	A32539
Zinc	0.048	0.0028	0.010		mg/L	1	3/2/2016 3:33:35 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: MED	
Barium	0.23	0.0011	0.0020		mg/L	1	3/1/2016 11:23:33 AM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/1/2016 11:23:33 AM	23939
Chromium	0.0034	0.0022	0.0060	J	mg/L	1	3/1/2016 11:23:33 AM	23939
Copper	0.011	0.0051	0.0060		mg/L	1	3/1/2016 11:23:33 AM	23939
Iron	6.4	0.072	0.20	*	mg/L	10	3/2/2016 3:03:44 PM	23939
Manganese	1.1	0.015	0.020	*	mg/L	10	3/2/2016 3:03:44 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/1/2016 11:23:33 AM	23939
Zinc	0.029	0.0039	0.010		mg/L	1	3/7/2016 1:41:41 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0024	0.000065	0.0010		mg/L	1	3/8/2016 3:37:17 PM	C32643

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 2:35:00 PM

Lab ID: 1602A10-002

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.0013	0.000026	0.00050		mg/L	1	3/8/2016 3:37:17 PM	C32643
Selenium	0.0031	0.00097	0.0050	J	mg/L	5	3/10/2016 4:30:47 PM	B32730
Uranium	0.042	0.000024	0.0025	*	mg/L	5	3/10/2016 4:30:47 PM	B32730
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0025	0.00029	0.0010		mg/L	1	3/9/2016 2:20:01 PM	24075
Lead	0.0090	0.000047	0.00050		mg/L	1	3/9/2016 2:20:01 PM	24075
Selenium	0.0029	0.00062	0.0050	J	mg/L	5	3/9/2016 3:26:21 PM	24075
Uranium	0.089	0.000025	0.0025	*	mg/L	5	3/9/2016 3:26:21 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.00014	0.000053	0.00020	J	mg/L	1	2/26/2016 12:37:51 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 1:42:31 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 1:42:31 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 2:35:00 PM

Lab ID: 1602A10-002

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 1:42:31 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 1:42:31 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 1:42:31 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 1:42:31 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 1:42:31 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 1:42:31 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 1:42:31 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 1:42:31 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 1:42:31 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 2:35:00 PM

Lab ID: 1602A10-002

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 1:42:31 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 1:42:31 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 1:42:31 PM	23981
Surr: 2-Fluorophenol	43.7	0	4.63-113		%Rec	1	3/2/2016 1:42:31 PM	23981
Surr: Phenol-d5	33.5	0	4.13-124		%Rec	1	3/2/2016 1:42:31 PM	23981
Surr: 2,4,6-Tribromophenol	46.9	0	5.14-132		%Rec	1	3/2/2016 1:42:31 PM	23981
Surr: Nitrobenzene-d5	74.2	0	9.13-140		%Rec	1	3/2/2016 1:42:31 PM	23981
Surr: 2-Fluorobiphenyl	76.9	0	10.8-132		%Rec	1	3/2/2016 1:42:31 PM	23981
Surr: 4-Terphenyl-d14	109	0	12.9-107	S	%Rec	1	3/2/2016 1:42:31 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	150	0.48	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Toluene	1.4	0.45	5.0	J	µg/L	5	2/25/2016 6:07:31 PM	R32418
Ethylbenzene	ND	0.56	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Methyl tert-butyl ether (MTBE)	55	1.1	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2,4-Trimethylbenzene	ND	0.52	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,3,5-Trimethylbenzene	ND	0.58	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2-Dichloroethane (EDC)	11	0.26	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.56	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Naphthalene	ND	0.42	10		µg/L	5	2/25/2016 6:07:31 PM	R32418
1-Methylnaphthalene	ND	1.0	20		µg/L	5	2/25/2016 6:07:31 PM	R32418
2-Methylnaphthalene	ND	0.79	20		µg/L	5	2/25/2016 6:07:31 PM	R32418
Acetone	ND	4.4	50		µg/L	5	2/25/2016 6:07:31 PM	R32418
Bromobenzene	ND	0.40	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Bromodichloromethane	ND	0.49	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Bromoform	ND	0.51	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Bromomethane	ND	3.9	15		µg/L	5	2/25/2016 6:07:31 PM	R32418
2-Butanone	ND	1.6	50		µg/L	5	2/25/2016 6:07:31 PM	R32418
Carbon disulfide	ND	3.0	50		µg/L	5	2/25/2016 6:07:31 PM	R32418
Carbon Tetrachloride	ND	0.54	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Chlorobenzene	ND	0.52	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Chloroethane	ND	0.73	10		µg/L	5	2/25/2016 6:07:31 PM	R32418
Chloroform	ND	0.44	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Chloromethane	ND	1.1	15		µg/L	5	2/25/2016 6:07:31 PM	R32418
2-Chlorotoluene	ND	2.0	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
4-Chlorotoluene	ND	0.64	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
cis-1,2-DCE	3.3	0.62	5.0	J	µg/L	5	2/25/2016 6:07:31 PM	R32418
cis-1,3-Dichloropropene	ND	0.50	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 2:35:00 PM

Lab ID: 1602A10-002

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.77	10		µg/L	5	2/25/2016 6:07:31 PM	R32418
Dibromochloromethane	ND	0.43	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Dibromomethane	ND	0.60	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2-Dichlorobenzene	ND	2.0	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,3-Dichlorobenzene	ND	0.72	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,4-Dichlorobenzene	ND	0.71	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Dichlorodifluoromethane	ND	1.6	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1-Dichloroethane	55	0.54	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1-Dichloroethene	61	0.38	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2-Dichloropropane	ND	0.24	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,3-Dichloropropane	ND	0.78	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
2,2-Dichloropropane	ND	0.60	10		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1-Dichloropropene	ND	0.67	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Hexachlorobutadiene	ND	0.99	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
2-Hexanone	ND	1.8	50		µg/L	5	2/25/2016 6:07:31 PM	R32418
Isopropylbenzene	1.2	0.49	5.0	J	µg/L	5	2/25/2016 6:07:31 PM	R32418
4-Isopropyltoluene	ND	0.70	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
4-Methyl-2-pentanone	ND	0.75	50		µg/L	5	2/25/2016 6:07:31 PM	R32418
Methylene Chloride	1.1	0.31	15	J	µg/L	5	2/25/2016 6:07:31 PM	R32418
n-Butylbenzene	ND	0.80	15		µg/L	5	2/25/2016 6:07:31 PM	R32418
n-Propylbenzene	ND	0.66	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
sec-Butylbenzene	ND	0.54	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Styrene	ND	0.48	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
tert-Butylbenzene	ND	0.48	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.56	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.53	10		µg/L	5	2/25/2016 6:07:31 PM	R32418
Tetrachloroethene (PCE)	ND	0.76	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
trans-1,2-DCE	ND	2.0	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
trans-1,3-Dichloropropene	ND	0.42	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2,3-Trichlorobenzene	ND	0.56	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2,4-Trichlorobenzene	ND	0.66	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1,1-Trichloroethane	ND	0.32	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,1,2-Trichloroethane	1.3	0.38	5.0	J	µg/L	5	2/25/2016 6:07:31 PM	R32418
Trichloroethene (TCE)	2.3	0.88	5.0	J	µg/L	5	2/25/2016 6:07:31 PM	R32418
Trichlorofluoromethane	ND	0.44	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
1,2,3-Trichloropropane	ND	0.56	10		µg/L	5	2/25/2016 6:07:31 PM	R32418
Vinyl chloride	7.1	0.32	5.0		µg/L	5	2/25/2016 6:07:31 PM	R32418
Xylenes, Total	ND	1.6	7.5		µg/L	5	2/25/2016 6:07:31 PM	R32418
Surr: 1,2-Dichloroethane-d4	93.9	0	70-130		%Rec	5	2/25/2016 6:07:31 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 2:35:00 PM

Lab ID: 1602A10-002

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	111	0	70-130		%Rec	5	2/25/2016 6:07:31 PM	R32418
Surr: Dibromofluoromethane	95.5	0	70-130		%Rec	5	2/25/2016 6:07:31 PM	R32418
Surr: Toluene-d8	104	0	70-130		%Rec	5	2/25/2016 6:07:31 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1602A10-003

Matrix: TRIP BLANK

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 2:56:35 PM	R32416
Surr: BFB	85.8	0	49.5-130		%Rec	1	2/25/2016 2:56:35 PM	R32416
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Acetone	ND	0.88	10		µg/L	1	2/25/2016 6:35:53 PM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/25/2016 6:35:53 PM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/25/2016 6:35:53 PM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Chloroform	ND	0.089	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1602A10-003

Matrix: TRIP BLANK

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/25/2016 6:35:53 PM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/25/2016 6:35:53 PM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/25/2016 6:35:53 PM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/25/2016 6:35:53 PM	R32418
Surr: 1,2-Dichloroethane-d4	92.0	0	70-130		%Rec	1	2/25/2016 6:35:53 PM	R32418
Surr: 4-Bromofluorobenzene	107	0	70-130		%Rec	1	2/25/2016 6:35:53 PM	R32418
Surr: Dibromofluoromethane	95.7	0	70-130		%Rec	1	2/25/2016 6:35:53 PM	R32418
Surr: Toluene-d8	104	0	70-130		%Rec	1	2/25/2016 6:35:53 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 4:35:00 PM

Lab ID: 1602A10-004

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	2/25/2016 6:30:02 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/25/2016 6:30:02 PM	23932
Surr: DNOP	129	0	70-141		%Rec	1	2/25/2016 6:30:02 PM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 3:21:17 PM	R32416
Surr: BFB	84.7	0	49.5-130		%Rec	1	2/25/2016 3:21:17 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.80	0.023	0.10		mg/L	1	2/26/2016 1:52:12 AM	R32424
Chloride	2400	5.5	100		mg/L	200	3/2/2016 5:27:03 PM	R32541
Bromide	4.3	0.65	2.0		mg/L	20	2/26/2016 2:04:37 AM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50		mg/L	1	2/26/2016 1:52:12 AM	R32424
Sulfate	360	1.3	10		mg/L	20	2/26/2016 2:04:37 AM	R32424
Nitrate+Nitrite as N	1.0	0.84	2.0	J	mg/L	10	3/1/2016 11:17:20 PM	A32498
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.063	0.0013	0.0020		mg/L	1	3/2/2016 3:37:25 PM	A32539
Cadmium	ND	0.00075	0.0020		mg/L	1	3/2/2016 3:37:25 PM	A32539
Calcium	180	1.3	5.0		mg/L	5	3/2/2016 3:45:49 PM	A32539
Chromium	ND	0.0018	0.0060		mg/L	1	3/2/2016 3:37:25 PM	A32539
Copper	ND	0.0040	0.0060		mg/L	1	3/2/2016 3:37:25 PM	A32539
Iron	0.084	0.0091	0.020		mg/L	1	3/2/2016 3:37:25 PM	A32539
Magnesium	30	0.013	1.0		mg/L	1	3/2/2016 3:37:25 PM	A32539
Manganese	0.12	0.00032	0.0020	*	mg/L	1	3/2/2016 3:37:25 PM	A32539
Potassium	9.6	0.18	1.0		mg/L	1	3/2/2016 3:37:25 PM	A32539
Silver	ND	0.0028	0.0050		mg/L	1	3/2/2016 3:37:25 PM	A32539
Sodium	1800	1.9	20		mg/L	20	3/9/2016 1:54:36 PM	B32673
Zinc	0.012	0.0028	0.010		mg/L	1	3/2/2016 3:37:25 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: MED	
Barium	0.12	0.0011	0.0020		mg/L	1	3/1/2016 11:35:23 AM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/1/2016 11:35:23 AM	23939
Chromium	0.0025	0.0022	0.0060	J	mg/L	1	3/1/2016 11:35:23 AM	23939
Copper	ND	0.0051	0.0060		mg/L	1	3/1/2016 11:35:23 AM	23939
Iron	3.6	0.036	0.10	*	mg/L	5	3/2/2016 3:07:37 PM	23939
Manganese	0.43	0.0015	0.0020	*	mg/L	1	3/1/2016 11:35:23 AM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/1/2016 11:35:23 AM	23939
Zinc	0.020	0.0039	0.010		mg/L	1	3/7/2016 1:45:21 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.00096	0.00032	0.0050	J	mg/L	5	3/10/2016 4:33:51 PM	B32730

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 4:35:00 PM

Lab ID: 1602A10-004

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.00041	0.00013	0.0025	J	mg/L	5	3/10/2016 4:33:51 PM	B32730
Selenium	0.0039	0.00097	0.0050	J	mg/L	5	3/10/2016 4:33:51 PM	B32730
Uranium	0.061	0.000048	0.0050	*	mg/L	10	3/10/2016 4:43:01 PM	B32730
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0015	0.0015	0.0050	J	mg/L	5	3/9/2016 3:29:21 PM	24075
Lead	0.0044	0.00024	0.0025		mg/L	5	3/9/2016 3:29:21 PM	24075
Selenium	0.0034	0.00062	0.0050	J	mg/L	5	3/9/2016 3:29:21 PM	24075
Uranium	0.063	0.000025	0.0025	*	mg/L	5	3/9/2016 3:29:21 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000095	0.000053	0.00020	J	mg/L	1	2/26/2016 12:39:54 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 3:12:31 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 3:12:31 PM	23981

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 4:35:00 PM

Lab ID: 1602A10-004

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 3:12:31 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 3:12:31 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 3:12:31 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 3:12:31 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 3:12:31 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 3:12:31 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 3:12:31 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 3:12:31 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 3:12:31 PM	23981

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	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 4:35:00 PM

Lab ID: 1602A10-004

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 3:12:31 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 3:12:31 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 3:12:31 PM	23981
Surr: 2-Fluorophenol	55.2	0	4.63-113		%Rec	1	3/2/2016 3:12:31 PM	23981
Surr: Phenol-d5	42.8	0	4.13-124		%Rec	1	3/2/2016 3:12:31 PM	23981
Surr: 2,4,6-Tribromophenol	56.0	0	5.14-132		%Rec	1	3/2/2016 3:12:31 PM	23981
Surr: Nitrobenzene-d5	88.7	0	9.13-140		%Rec	1	3/2/2016 3:12:31 PM	23981
Surr: 2-Fluorobiphenyl	90.0	0	10.8-132		%Rec	1	3/2/2016 3:12:31 PM	23981
Surr: 4-Terphenyl-d14	119	0	12.9-107	S	%Rec	1	3/2/2016 3:12:31 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Methyl tert-butyl ether (MTBE)	15	0.21	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2-Dichloroethane (EDC)	0.59	0.053	1.0	J	µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Acetone	ND	0.88	10		µg/L	1	2/25/2016 7:04:18 PM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/25/2016 7:04:18 PM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/25/2016 7:04:18 PM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Chloroform	ND	0.089	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
cis-1,2-DCE	0.13	0.12	1.0	J	µg/L	1	2/25/2016 7:04:18 PM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 4:35:00 PM

Lab ID: 1602A10-004

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1-Dichloroethane	1.9	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1-Dichloroethene	0.47	0.076	1.0	J	µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2-Dichloropropane	0.19	0.047	1.0	J	µg/L	1	2/25/2016 7:04:18 PM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/25/2016 7:04:18 PM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/25/2016 7:04:18 PM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/25/2016 7:04:18 PM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/25/2016 7:04:18 PM	R32418
Surr: 1,2-Dichloroethane-d4	94.1	0	70-130		%Rec	1	2/25/2016 7:04:18 PM	R32418

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	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-27

Project: Quarterly GW Sampling

Collection Date: 2/22/2016 4:35:00 PM

Lab ID: 1602A10-004

Matrix: AQUEOUS

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	106	0	70-130		%Rec	1	2/25/2016 7:04:18 PM	R32418
Surr: Dibromofluoromethane	96.3	0	70-130		%Rec	1	2/25/2016 7:04:18 PM	R32418
Surr: Toluene-d8	105	0	70-130		%Rec	1	2/25/2016 7:04:18 PM	R32418

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1602A10-005

Matrix: TRIP BLANK

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 3:45:58 PM	R32416
Surr: BFB	87.4	0	49.5-130		%Rec	1	2/25/2016 3:45:58 PM	R32416
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Acetone	ND	0.88	10		µg/L	1	2/25/2016 7:32:42 PM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/25/2016 7:32:42 PM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/25/2016 7:32:42 PM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Chloroform	ND	0.089	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A10

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1602A10-005

Matrix: TRIP BLANK

Received Date: 2/23/2016 4:25:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/25/2016 7:32:42 PM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/25/2016 7:32:42 PM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/25/2016 7:32:42 PM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/25/2016 7:32:42 PM	R32418
Surr: 1,2-Dichloroethane-d4	94.5	0	70-130		%Rec	1	2/25/2016 7:32:42 PM	R32418
Surr: 4-Bromofluorobenzene	107	0	70-130		%Rec	1	2/25/2016 7:32:42 PM	R32418
Surr: Dibromofluoromethane	96.9	0	70-130		%Rec	1	2/25/2016 7:32:42 PM	R32418
Surr: Toluene-d8	104	0	70-130		%Rec	1	2/25/2016 7:32:42 PM	R32418

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB-B	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: PBW	Batch ID: B32475			RunNo: 32475						
Prep Date:	Analysis Date: 3/1/2016			SeqNo: 993271		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-B	SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: LCSW	Batch ID: B32475			RunNo: 32475						
Prep Date:	Analysis Date: 3/1/2016			SeqNo: 993272		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	96.5	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.5	85	115			
Calcium	50	1.0	50.00	0	100	85	115			
Chromium	0.48	0.0060	0.5000	0	96.3	85	115			
Copper	0.49	0.0060	0.5000	0	98.1	85	115			
Iron	0.49	0.020	0.5000	0	97.5	85	115			
Magnesium	50	1.0	50.00	0	99.6	85	115			
Manganese	0.47	0.0020	0.5000	0	94.0	85	115			
Potassium	49	1.0	50.00	0	97.5	85	115			
Silver	0.098	0.0050	0.1000	0	97.8	85	115			
Sodium	49	1.0	50.00	0	98.0	85	115			

Sample ID LLCS-B	SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: BatchQC	Batch ID: B32475			RunNo: 32475						
Prep Date:	Analysis Date: 3/1/2016			SeqNo: 993273		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Barium	0.0023	0.0020	0.002000	0	114	50	150			
Cadmium	0.0020	0.0020	0.002000	0	102	50	150			
Calcium	0.56	1.0	0.5000	0	113	50	150			J
Chromium	0.0056	0.0060	0.006000	0	92.7	50	150			J
Copper	0.0069	0.0060	0.006000	0	115	50	150			
Iron	0.020	0.020	0.02000	0	101	50	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	LLLCS-B		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: B32475		RunNo: 32475					
Prep Date:			Analysis Date: 3/1/2016		SeqNo: 993273		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	0.53	1.0	0.5000	0	105	50	150			J
Manganese	0.0021	0.0020	0.002000	0	106	50	150			
Potassium	0.50	1.0	0.5000	0	99.8	50	150			J
Silver	0.0050	0.0050	0.005000	0	99.2	50	150			J
Sodium	0.54	1.0	0.5000	0	109	50	150			J

Sample ID	MB-A	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: A32539			RunNo: 32539					
Prep Date:		Analysis Date: 3/2/2016			SeqNo: 995471		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-A		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: A32539		RunNo: 32539					
Prep Date:			Analysis Date: 3/2/2016		SeqNo: 995472		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.47	0.0020	0.5000	0	94.8	85	115			
Cadmium	0.49	0.0020	0.5000	0	98.5	85	115			
Calcium	49	1.0	50.00	0	98.3	85	115			
Chromium	0.47	0.0060	0.5000	0	94.6	85	115			
Copper	0.48	0.0060	0.5000	0	95.8	85	115			
Iron	0.47	0.020	0.5000	0	93.4	85	115			
Magnesium	50	1.0	50.00	0	99.1	85	115			
Manganese	0.46	0.0020	0.5000	0	91.9	85	115			
Potassium	48	1.0	50.00	0	95.8	85	115			
Silver	0.098	0.0050	0.1000	0	97.5	85	115			
Sodium	49	1.0	50.00	0	97.3	85	115			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID LCS-A	SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: LCSW	Batch ID: A32539			RunNo: 32539						
Prep Date:	Analysis Date: 3/2/2016			SeqNo: 995472		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc	0.47	0.010	0.5000	0	93.6	85	115			

Sample ID LLCS-A	SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: BatchQC	Batch ID: A32539			RunNo: 32539						
Prep Date:	Analysis Date: 3/2/2016			SeqNo: 995473		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0017	0.0020	0.002000	0	86.5	50	150			J
Cadmium	0.0022	0.0020	0.002000	0	108	50	150			
Calcium	0.51	1.0	0.5000	0	101	50	150			J
Chromium	0.0063	0.0060	0.006000	0	106	50	150			
Copper	0.0074	0.0060	0.006000	0	124	50	150			
Iron	0.021	0.020	0.02000	0	106	50	150			
Magnesium	0.53	1.0	0.5000	0	107	50	150			J
Manganese	0.0021	0.0020	0.002000	0	106	50	150			
Potassium	0.55	1.0	0.5000	0	110	50	150			J
Silver	0.0048	0.0050	0.005000	0	95.8	50	150			J
Sodium	0.53	1.0	0.5000	0	106	50	150			J
Zinc	0.0049	0.010	0.005000	0	98.8	50	150			J

Sample ID MB-B	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: PBW	Batch ID: B32673			RunNo: 32673						
Prep Date:	Analysis Date: 3/9/2016			SeqNo: 999902		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	ND	1.0								

Sample ID LCS-B	SampType: LCS			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: LCSW	Batch ID: B32673			RunNo: 32673						
Prep Date:	Analysis Date: 3/9/2016			SeqNo: 999903		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	53	1.0	50.00	0	105	85	115			

Sample ID LLCS-B	SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals						
Client ID: BatchQC	Batch ID: B32673			RunNo: 32673						
Prep Date:	Analysis Date: 3/9/2016			SeqNo: 999904		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sodium	0.49	1.0	0.5000	0	97.1	50	150			J

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB-23939	SampType: MBLK		TestCode: EPA Method 200.7: Total Metals							
Client ID: PBW	Batch ID: 23939		RunNo: 32475							
Prep Date: 2/25/2016	Analysis Date: 3/1/2016		SeqNo: 993256		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	0.012	0.020								J
Manganese	ND	0.0020								
Silver	ND	0.0050								

Sample ID LCS-23939	SampType: LCS		TestCode: EPA Method 200.7: Total Metals							
Client ID: LCSW	Batch ID: 23939		RunNo: 32475							
Prep Date: 2/25/2016	Analysis Date: 3/1/2016		SeqNo: 993257		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	98.5	85	115			
Cadmium	0.52	0.0020	0.5000	0	103	85	115			
Chromium	0.50	0.0060	0.5000	0	99.3	85	115			
Copper	0.49	0.0060	0.5000	0	98.1	85	115			
Iron	0.50	0.020	0.5000	0	99.6	85	115			
Manganese	0.48	0.0020	0.5000	0	95.9	85	115			
Silver	0.10	0.0050	0.1000	0	100	85	115			

Sample ID LLCS-23939	SampType: LCSLL		TestCode: EPA Method 200.7: Total Metals							
Client ID: BatchQC	Batch ID: 23939		RunNo: 32475							
Prep Date: 2/25/2016	Analysis Date: 3/1/2016		SeqNo: 993258		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0023	0.0020	0.002000	0	117	50	150			
Cadmium	0.0021	0.0020	0.002000	0	106	50	150			
Chromium	0.0067	0.0060	0.006000	0	112	50	150			
Copper	0.0066	0.0060	0.006000	0	111	50	150			
Iron	0.021	0.020	0.02000	0	106	50	150			
Manganese	0.0021	0.0020	0.002000	0	103	50	150			
Silver	0.0050	0.0050	0.005000	0	101	50	150			

Sample ID 1602A10-001FMS	SampType: MS		TestCode: EPA Method 200.7: Total Metals							
Client ID: MKTF-24	Batch ID: 23939		RunNo: 32475							
Prep Date: 2/25/2016	Analysis Date: 3/1/2016		SeqNo: 993702		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.50	0.0020	0.5000	0	99.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	1602A10-001FMS	SampType:	MS	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	MKTF-24	Batch ID:	23939	RunNo:	32475					
Prep Date:	2/25/2016	Analysis Date:	3/1/2016	SeqNo:	993702	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0.005920	97.4	70	130			
Copper	0.51	0.0060	0.5000	0.008620	99.5	70	130			

Sample ID	1602A10-001FMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	MKTF-24	Batch ID:	23939	RunNo:	32475					
Prep Date:	2/25/2016	Analysis Date:	3/1/2016	SeqNo:	993703	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	0.51	0.0020	0.5000	0	102	70	130	2.39	20	
Chromium	0.50	0.0060	0.5000	0.005920	99.6	70	130	2.17	20	
Copper	0.52	0.0060	0.5000	0.008620	102	70	130	2.67	20	

Sample ID	1602A10-001FMS	SampType:	MS	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	MKTF-24	Batch ID:	23939	RunNo:	32539					
Prep Date:	2/25/2016	Analysis Date:	3/2/2016	SeqNo:	995513	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.98	0.0020	0.5000	0.5084	94.0	70	130			
Silver	0.061	0.0050	0.1000	0	60.6	70	130			S

Sample ID	1602A10-001FMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	MKTF-24	Batch ID:	23939	RunNo:	32539					
Prep Date:	2/25/2016	Analysis Date:	3/2/2016	SeqNo:	995514	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	1.0	0.0020	0.5000	0.5084	97.7	70	130	1.86	20	
Silver	0.050	0.0050	0.1000	0	50.0	70	130	19.2	20	S

Sample ID	1602A10-001FMS	SampType:	MS	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	MKTF-24	Batch ID:	23939	RunNo:	32539					
Prep Date:	2/25/2016	Analysis Date:	3/2/2016	SeqNo:	995520	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	2.7	0.010	0.5000	2.297	84.9	70	130			

Sample ID	1602A10-001FMSD	SampType:	MSD	TestCode:	EPA Method 200.7: Total Metals					
Client ID:	MKTF-24	Batch ID:	23939	RunNo:	32539					
Prep Date:	2/25/2016	Analysis Date:	3/2/2016	SeqNo:	995521	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	1602A10-001FMSD			SampType:	MSD			TestCode:	EPA Method 200.7: Total Metals		
Client ID:	MKTf-24			Batch ID:	23939			RunNo:	32539		
Prep Date:	2/25/2016			Analysis Date:	3/2/2016			SeqNo:	995521		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Manganese	2.8	0.010	0.5000	2.297	102	70	130	3.17	20		

Sample ID	MB-24075			SampType:	MBLK			TestCode:	EPA Method 200.7: Total Metals		
Client ID:	PBW			Batch ID:	24075			RunNo:	32607		
Prep Date:	3/3/2016			Analysis Date:	3/7/2016			SeqNo:	997674		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Zinc	ND	0.010									

Sample ID	LCS-24075			SampType:	LCS			TestCode:	EPA Method 200.7: Total Metals		
Client ID:	LCSW			Batch ID:	24075			RunNo:	32607		
Prep Date:	3/3/2016			Analysis Date:	3/7/2016			SeqNo:	997675		
								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	101	85	115				

Sample ID	LLLCS-24075			SampType:	LCSLL			TestCode:	EPA Method 200.7: Total Metals		
Client ID:	BatchQC			Batch ID:	24075			RunNo:	32607		
Prep Date:	3/3/2016			Analysis Date:	3/7/2016			SeqNo:	997676		
								Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Zinc	0.0057	0.010	0.005000	0	115	50	150			J	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: LCSW	Batch ID: C32643			RunNo: 32643						
Prep Date:	Analysis Date: 3/8/2016			SeqNo: 998882		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	93.5	85	115			
Lead	0.012	0.00050	0.01250	0	96.0	85	115			
Uranium	0.012	0.00050	0.01250	0	95.5	85	115			

Sample ID LLCS	SampType: LCSLL			TestCode: EPA 200.8: Dissolved Metals						
Client ID: BatchQC	Batch ID: C32643			RunNo: 32643						
Prep Date:	Analysis Date: 3/8/2016			SeqNo: 998883		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00099	0.0010	0.001000	0	98.8	50	150			J
Lead	0.00051	0.00050	0.0005000	0	102	50	150			
Uranium	0.00049	0.00050	0.0005000	0	98.0	50	150			J

Sample ID MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID: PBW	Batch ID: C32643			RunNo: 32643						
Prep Date:	Analysis Date: 3/8/2016			SeqNo: 998884		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Uranium	ND	0.00050								

Sample ID 1602A10-004EMSDL	SampType: MSD			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-27	Batch ID: B32730			RunNo: 32730						
Prep Date:	Analysis Date: 3/10/2016			SeqNo: 1001699		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.0009615	103	70	130	0.307	20	
Lead	0.063	0.0025	0.06250	0.0004068	100	70	130	0.120	20	
Selenium	0.12	0.0050	0.1250	0.003873	95.8	70	130	2.31	20	

Sample ID 1602A10-004EMSL	SampType: MS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-27	Batch ID: B32730			RunNo: 32730						
Prep Date:	Analysis Date: 3/10/2016			SeqNo: 1001700		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.0009615	102	70	130			
Lead	0.063	0.0025	0.06250	0.0004068	100	70	130			
Selenium	0.12	0.0050	0.1250	0.003873	93.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: LCSW	Batch ID: B32730			RunNo: 32730						
Prep Date:	Analysis Date: 3/10/2016			SeqNo: 1001719		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	92.3	85	115			
Lead	0.012	0.00050	0.01250	0	93.0	85	115			
Selenium	0.024	0.0010	0.02500	0	94.0	85	115			
Uranium	0.012	0.00050	0.01250	0	93.5	85	115			

Sample ID LLCS	SampType: LCSLL			TestCode: EPA 200.8: Dissolved Metals						
Client ID: BatchQC	Batch ID: B32730			RunNo: 32730						
Prep Date:	Analysis Date: 3/10/2016			SeqNo: 1001720		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00093	0.0010	0.001000	0	93.3	50	150			J
Lead	0.00048	0.00050	0.0005000	0	96.9	50	150			J
Selenium	0.0010	0.0010	0.001000	0	105	50	150			
Uranium	0.00047	0.00050	0.0005000	0	94.8	50	150			J

Sample ID MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID: PBW	Batch ID: B32730			RunNo: 32730						
Prep Date:	Analysis Date: 3/10/2016			SeqNo: 1001721		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	0.000015	0.00050								J

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB-24075		SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total				
Client ID:	PBW		Batch ID:	24075		RunNo:	32687				
Prep Date:	3/3/2016		Analysis Date:	3/9/2016		SeqNo:	1000380		Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	ND	0.0010									
Lead	ND	0.00050									
Selenium	ND	0.0010									
Uranium	ND	0.00050									

Sample ID	MSLCS-24075		SampType: LCS		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	LCSW		Batch ID: 24075		RunNo: 32687					
Prep Date:	3/3/2016		Analysis Date: 3/9/2016		SeqNo: 1000383		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			
Lead	0.013	0.00050	0.01250	0	101	85	115			
Selenium	0.025	0.0010	0.02500	0	98.0	85	115			
Uranium	0.012	0.00050	0.01250	0	98.8	85	115			

Sample ID	MSLLLCs-24075		SampType: LCSLL		TestCode: 200.8 ICPMS Metals:Total					
Client ID:	BatchQC		Batch ID: 24075		RunNo: 32687					
Prep Date:	3/3/2016		Analysis Date: 3/9/2016		SeqNo: 1000386		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00087	0.0010	0.001000	0	86.9	50	150			J
Lead	0.00046	0.00050	0.0005000	0	91.5	50	150			J
Selenium	0.00081	0.0010	0.001000	0	81.0	50	150			J
Uranium	0.00044	0.00050	0.0005000	0	87.4	50	150			J

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB-23952		SampType: mblk		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 23952		RunNo: 32446					
Prep Date:	2/25/2016		Analysis Date: 2/26/2016		SeqNo: 992342		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	0.000060	0.00020								J

Sample ID	LCS-23952			SampType:	lcs		TestCode:	EPA Method 245.1: Mercury			
Client ID:	LCSW			Batch ID:	23952		RunNo:	32446			
Prep Date:	2/25/2016			Analysis Date:	2/26/2016		SeqNo:	992343		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	101	80	120				

Sample ID	1602A10-001FMS		SampType: ms		TestCode: EPA Method 245.1: Mercury					
Client ID:	MKTF-24		Batch ID: 23952		RunNo: 32446					
Prep Date:	2/25/2016		Analysis Date: 2/26/2016		SeqNo: 992345		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0.0001332	105	75	125			

Sample ID	1602A10-001FMSD		SampType: msd		TestCode: EPA Method 245.1: Mercury					
Client ID:	MKTF-24		Batch ID: 23952		RunNo: 32446					
Prep Date:	2/25/2016		Analysis Date: 2/26/2016		SeqNo: 992346		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0054	0.00020	0.005000	0.0001332	106	75	125	0.889	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R32424			RunNo: 32424						
Prep Date:	Analysis Date: 2/25/2016			SeqNo: 991478		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
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: R32424			RunNo: 32424						
Prep Date:	Analysis Date: 2/25/2016			SeqNo: 991479		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	97.4	90	110			
Bromide	2.5	0.10	2.500	0	99.6	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.4	90	110			
Sulfate	9.9	0.50	10.00	0	98.6	90	110			

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: R32480			RunNo: 32480						
Prep Date:	Analysis Date: 2/29/2016			SeqNo: 993501		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: R32480			RunNo: 32480						
Prep Date:	Analysis Date: 2/29/2016			SeqNo: 993502		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.7	0.20	3.500	0	106	90	110			

Sample ID MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions						
Client ID: PBW	Batch ID: A32498			RunNo: 32498						
Prep Date:	Analysis Date: 3/1/2016			SeqNo: 994156		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Nitrate+Nitrite as N	ND	0.20								

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	LCS		SampType: LCS			TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: A32498			RunNo: 32498					
Prep Date:			Analysis Date: 3/1/2016			SeqNo: 994157		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	5.0	0.50	5.000	0	99.9	90	110				
Nitrate+Nitrite as N	3.6	0.20	3.500	0	104	90	110				

Sample ID	MB		SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW		Batch ID: R32541			RunNo: 32541					
Prep Date:			Analysis Date: 3/2/2016			SeqNo: 995627		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: R32541			RunNo: 32541					
Prep Date:			Analysis Date: 3/2/2016			SeqNo: 995628		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	96.3	90	110				

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	MB-23932		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range			
Client ID:	PBW		Batch ID:	23932		RunNo:	32388			
Prep Date:	2/25/2016		Analysis Date:	2/25/2016		SeqNo:	990951		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		116	70	141			

Sample ID	LCS-23932		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range			
Client ID:	LCSW		Batch ID:	23932		RunNo:	32422			
Prep Date:	2/25/2016		Analysis Date:	2/26/2016		SeqNo:	991575		Units: mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.7	1.0	5.000	0	114	71.3	139			
Surr: DNOP	0.53		0.5000		106	70	141			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: R32416		RunNo: 32416							
Prep Date:	Analysis Date: 2/25/2016		SeqNo: 991284		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	17		20.00		86.1	49.5	130			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: R32416		RunNo: 32416							
Prep Date:	Analysis Date: 2/25/2016		SeqNo: 991285		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.2	80	120			
Surr: BFB	20		20.00		102	49.5	130			

Sample ID 1602A10-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MKTF-24	Batch ID: R32416		RunNo: 32416							
Prep Date:	Analysis Date: 2/25/2016		SeqNo: 991293		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	34	0.50	5.000	29.48	82.2	70	130			
Surr: BFB	270		200.0		137	49.5	130			S

Sample ID 1602A10-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: MKTF-24	Batch ID: R32416		RunNo: 32416							
Prep Date:	Analysis Date: 2/25/2016		SeqNo: 991294		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	0.50	5.000	29.48	74.2	70	130	1.20	20	
Surr: BFB	270		200.0		136	49.5	130	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R32418			RunNo: 32418					
Prep Date:		Analysis Date: 2/25/2016			SeqNo: 991320	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	0.26	3.0								J
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.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID rb	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES					
Client ID: PBW	Batch ID: R32418				RunNo: 32418					
Prep Date:	Analysis Date: 2/25/2016				SeqNo: 991320	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	0.61	3.0								J
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	9.7		10.00		97.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.5	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID 100ng lcs	SampType: LCS				TestCode: EPA Method 8260B: VOLATILES					
Client ID: LCSW	Batch ID: R32418				RunNo: 32418					
Prep Date:	Analysis Date: 2/25/2016				SeqNo: 991321	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.7	70	130			
Toluene	22	1.0	20.00	0	109	70	130			
Chlorobenzene	22	1.0	20.00	0	110	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R32418			RunNo: 32418					
Prep Date:		Analysis Date: 2/25/2016			SeqNo: 991321		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	95.6	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	mb-23981		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 23981		RunNo: 32524					
Prep Date:	2/29/2016		Analysis Date: 3/2/2016		SeqNo: 995048		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
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	mb-23981		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 23981		RunNo: 32524					
Prep Date:	2/29/2016		Analysis Date: 3/2/2016		SeqNo: 995048		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	190		200.0		92.6	4.63	113			
Surr: Phenol-d5	190		200.0		94.1	4.13	124			
Surr: 2,4,6-Tribromophenol	94		200.0		47.2	5.14	132			
Surr: Nitrobenzene-d5	87		100.0		87.4	9.13	140			
Surr: 2-Fluorobiphenyl	87		100.0		86.9	10.8	132			
Surr: 4-Terphenyl-d14	110		100.0		110	12.9	107			S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	Ics-23981	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 23981			RunNo: 32524					
Prep Date:	2/29/2016	Analysis Date: 3/2/2016			SeqNo: 995049		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	91	10	100.0	0	91.0	40.2	107			
4-Chloro-3-methylphenol	160	10	200.0	0	77.5	48.2	107			
2-Chlorophenol	160	10	200.0	0	81.6	42.5	106			
1,4-Dichlorobenzene	83	10	100.0	0	83.3	31.6	111			
2,4-Dinitrotoluene	68	10	100.0	0	67.8	33.6	86.5			
N-Nitrosodi-n-propylamine	85	10	100.0	0	84.8	44	106			
4-Nitrophenol	130	10	200.0	0	63.3	25.5	109			
Pentachlorophenol	97	20	200.0	0	48.6	38.8	97.8			
Phenol	170	10	200.0	0	84.5	22.7	116			
Pyrene	77	10	100.0	0	76.8	29.3	138			
1,2,4-Trichlorobenzene	84	10	100.0	0	83.6	35.3	123			
Surr: 2-Fluorophenol	160		200.0		80.0	4.63	113			
Surr: Phenol-d5	170		200.0		84.9	4.13	124			
Surr: 2,4,6-Tribromophenol	100		200.0		51.0	5.14	132			
Surr: Nitrobenzene-d5	84		100.0		84.1	9.13	140			
Surr: 2-Fluorobiphenyl	91		100.0		91.2	10.8	132			
Surr: 4-Terphenyl-d14	100		100.0		99.8	12.9	107			

Sample ID	1602a10-002cmsd	SampType: MSD			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	MKTF-26	Batch ID: 23981			RunNo: 32524					
Prep Date:	2/29/2016	Analysis Date: 3/2/2016			SeqNo: 995061		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	81	10	100.0	0	80.9	25.5	126	0.396	31.3	
4-Chloro-3-methylphenol	140	10	200.0	0	71.3	26.6	138	1.94	29	
2-Chlorophenol	150	10	200.0	0	77.0	23.9	133	20.6	28.4	
1,4-Dichlorobenzene	81	10	100.0	0	81.0	20.3	122	6.05	28.2	
2,4-Dinitrotoluene	79	10	100.0	0	79.3	40	94.5	15.6	22.9	
N-Nitrosodi-n-propylamine	88	10	100.0	0	88.3	25.9	131	6.89	28.8	
4-Nitrophenol	70	10	200.0	0	35.1	17.2	88.9	161	41.5	R
Pentachlorophenol	120	20	200.0	0	58.6	13.6	123	132	45.1	R
Phenol	74	10	200.0	0	36.9	20.7	100	4.43	33.9	
Pyrene	71	10	100.0	0	70.8	21.8	129	7.27	33.6	
1,2,4-Trichlorobenzene	86	10	100.0	0	86.3	22	130	2.09	28.2	
Surr: 2-Fluorophenol	95		200.0		47.6	4.63	113	0	0	
Surr: Phenol-d5	68		200.0		34.0	4.13	124	0	0	
Surr: 2,4,6-Tribromophenol	160		200.0		80.8	5.14	132	0	0	
Surr: Nitrobenzene-d5	88		100.0		87.9	9.13	140	0	0	
Surr: 2-Fluorobiphenyl	86		100.0		86.4	10.8	132	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1602A10

31-Mar-16

Client: Western Refining Southwest, Gallup

Project: Quarterly GW Sampling

Sample ID	1602a10-002cmsd	SampType:	MSD	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	MKTF-26	Batch ID:	23981	RunNo:	32524					
Prep Date:	2/29/2016	Analysis Date:	3/2/2016	SeqNo:	995061	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	67		100.0		67.4	12.9	107	0	0	

Sample ID	1602a10-002cms	SampType:	MS	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	MKTF-26	Batch ID:	23981	RunNo:	32558					
Prep Date:	2/29/2016	Analysis Date:	3/3/2016	SeqNo:	996124	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	83	10	100.0	0	82.5	46.4	121			
4-Chloro-3-methylphenol	150	10	200.0	0	74.4	45.3	135			
2-Chlorophenol	130	10	200.0	0	67.4	23.9	133			
1,4-Dichlorobenzene	76	10	100.0	0	76.5	42.6	104			
2,4-Dinitrotoluene	78	10	100.0	0	77.6	28.9	126			
N-Nitrosodi-n-propylamine	81	10	100.0	0	81.4	49.2	117			
4-Nitrophenol	9.3	10	200.0	0	4.67	18.1	97.2			JS
Pentachlorophenol	36	20	200.0	0	18.1	24.8	127			S
Phenol	74	10	200.0	0	36.9	17.9	93.6			
Pyrene	82	10	100.0	0	81.8	29.6	142			
1,2,4-Trichlorobenzene	79	10	100.0	0	79.4	39.5	109			
Surr: 2-Fluorophenol	67		200.0		33.6	4.63	113			
Surr: Phenol-d5	66		200.0		33.1	4.13	124			
Surr: 2,4,6-Tribromophenol	95		200.0		47.3	5.14	132			
Surr: Nitrobenzene-d5	81		100.0		81.0	9.13	140			
Surr: 2-Fluorobiphenyl	80		100.0		79.5	10.8	132			
Surr: 4-Terphenyl-d14	62		100.0		62.3	12.9	107			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1602A10

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

2/23/2016 4:25:00 PM

Completed By: Ashley Gallegos

2/24/2016 11:20:32 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ?

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☒

9. Was preservative added to bottles?

Yes ☒

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☒

No ☐

No VOA Vials ☐

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

Yes ☒

No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

9

(<2 or >12 unless noted)

Adjusted?

Yes

Checked by:

JN

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 SW, INC.

Address: GALLUP REFINERY

Project Name: 2 GIANT CROSSING RD

Project #: GALLUP NM 87301

Phone #: 505-722-0231

Email or Fax#: CHERYL.JOHNSON@WMR.COM

A/QC Package:

Standard ☒ Level 4 (Full Validation)

Accreditation

NELAP ☐ Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

Phone #:

Email or Fax#:

A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

Phone #:

Email or Fax#:

A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

Phone #:

Email or Fax#:

A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

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A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

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A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

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Email or Fax#:

A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

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A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

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Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

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A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

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Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice: ☒ Yes ☐ No

Project Manager:

CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

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Preservative Type

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Sample Temperature

On Ice: ☒ Yes ☐ No

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CHERYL JOHNSON

Sampler: TRACY PAYNE

Turn-Around Time: ☒ Standard ☐ Rush

Project Name:

Project #:

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A/QC Package:

Standard

Accreditation

NELAP

Other

EDD (Type)

Date

Time

Matrix

Sample Request ID

Container Type and #

Preservative Type

HEAL No.

Sample Temperature

On Ice



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

March 31, 2016

Cheryl Johnson

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

RE: Quarterly GW Sampling

OrderNo.: 1602A45

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/25/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 9:35:00 AM

Lab ID: 1602A45-001

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	2/25/2016 6:51:46 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/25/2016 6:51:46 PM	23932
Surr: DNOP	132	0	70-141		%Rec	1	2/25/2016 6:51:46 PM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 4:10:40 PM	R32416
Surr: BFB	84.7	0	49.5-130		%Rec	1	2/25/2016 4:10:40 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.93	0.023	0.10		mg/L	1	2/25/2016 9:43:58 PM	R32424
Chloride	500	1.4	25		mg/L	50	3/1/2016 4:52:38 PM	R32498
Bromide	3.1	0.65	2.0		mg/L	20	2/25/2016 9:56:23 PM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/25/2016 9:43:58 PM	R32424
Sulfate	160	1.3	10		mg/L	20	2/25/2016 9:56:23 PM	R32424
Nitrate+Nitrite as N	4.9	0.42	1.0		mg/L	5	2/29/2016 1:44:20 PM	R32480
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.069	0.0013	0.0020		mg/L	1	3/2/2016 3:47:52 PM	A32539
Cadmium	ND	0.00075	0.0020		mg/L	1	3/2/2016 3:47:52 PM	A32539
Calcium	49	0.26	1.0		mg/L	1	3/2/2016 3:47:52 PM	A32539
Chromium	ND	0.0018	0.0060		mg/L	1	3/2/2016 3:47:52 PM	A32539
Copper	ND	0.0040	0.0060		mg/L	1	3/2/2016 3:47:52 PM	A32539
Iron	0.064	0.0091	0.020		mg/L	1	3/2/2016 3:47:52 PM	A32539
Magnesium	9.8	0.013	1.0		mg/L	1	3/2/2016 3:47:52 PM	A32539
Manganese	0.016	0.00032	0.0020		mg/L	1	3/2/2016 3:47:52 PM	A32539
Potassium	2.2	0.18	1.0		mg/L	1	3/2/2016 3:47:52 PM	A32539
Silver	ND	0.0028	0.0050		mg/L	1	3/2/2016 3:47:52 PM	A32539
Sodium	620	0.96	10		mg/L	10	3/9/2016 3:43:34 PM	B32673
Zinc	0.027	0.0028	0.010		mg/L	1	3/2/2016 3:47:52 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.14	0.0011	0.0020		mg/L	1	3/2/2016 3:09:40 PM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/2/2016 3:09:40 PM	23939
Chromium	0.0028	0.0022	0.0060	J	mg/L	1	3/2/2016 3:09:40 PM	23939
Copper	ND	0.0051	0.0060		mg/L	1	3/2/2016 3:09:40 PM	23939
Iron	3.7	0.036	0.10	*	mg/L	5	3/9/2016 3:15:24 PM	23939
Manganese	0.18	0.0015	0.0020	*	mg/L	1	3/2/2016 3:09:40 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/2/2016 3:09:40 PM	23939
Zinc	0.018	0.0039	0.010		mg/L	1	3/7/2016 1:49:29 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0026	0.000065	0.0010		mg/L	1	3/10/2016 4:46:06 PM	B32730

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 9:35:00 AM

Lab ID: 1602A45-001

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.00039	0.000026	0.00050	J	mg/L	1	3/10/2016 4:46:06 PM	B32730
Selenium	0.0061	0.00097	0.0050		mg/L	5	3/15/2016 3:16:08 PM	B32805
Uranium	0.16	0.000048	0.0050	*	mg/L	10	3/15/2016 3:19:11 PM	B32805
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0032	0.00029	0.0010		mg/L	1	3/9/2016 2:38:07 PM	24075
Lead	0.0047	0.000047	0.00050		mg/L	1	3/9/2016 2:38:07 PM	24075
Selenium	0.0043	0.0012	0.010	J	mg/L	10	3/9/2016 3:32:22 PM	24075
Uranium	0.16	0.000049	0.0050	*	mg/L	10	3/9/2016 3:32:22 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000069	0.000053	0.00020	J	mg/L	1	2/26/2016 12:41:57 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 3:42:28 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 3:42:28 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 9:35:00 AM

Lab ID: 1602A45-001

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 3:42:28 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 3:42:28 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 3:42:28 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 3:42:28 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 3:42:28 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 3:42:28 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 3:42:28 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 3:42:28 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 3:42:28 PM	23981

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 9:35:00 AM

Lab ID: 1602A45-001

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 3:42:28 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 3:42:28 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 3:42:28 PM	23981
Surr: 2-Fluorophenol	55.0	0	4.63-113		%Rec	1	3/2/2016 3:42:28 PM	23981
Surr: Phenol-d5	41.7	0	4.13-124		%Rec	1	3/2/2016 3:42:28 PM	23981
Surr: 2,4,6-Tribromophenol	56.8	0	5.14-132		%Rec	1	3/2/2016 3:42:28 PM	23981
Surr: Nitrobenzene-d5	88.1	0	9.13-140		%Rec	1	3/2/2016 3:42:28 PM	23981
Surr: 2-Fluorobiphenyl	90.9	0	10.8-132		%Rec	1	3/2/2016 3:42:28 PM	23981
Surr: 4-Terphenyl-d14	115	0	12.9-107	S	%Rec	1	3/2/2016 3:42:28 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Acetone	ND	0.88	10		µg/L	1	2/25/2016 8:01:02 PM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/25/2016 8:01:02 PM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/25/2016 8:01:02 PM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Chloroform	ND	0.089	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 9:35:00 AM

Lab ID: 1602A45-001

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/25/2016 8:01:02 PM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/25/2016 8:01:02 PM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/25/2016 8:01:02 PM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/25/2016 8:01:02 PM	R32418
Surr: 1,2-Dichloroethane-d4	94.6	0	70-130		%Rec	1	2/25/2016 8:01:02 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-28

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 9:35:00 AM

Lab ID: 1602A45-001

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	110	0	70-130		%Rec	1	2/25/2016 8:01:02 PM	R32418
Surr: Dibromofluoromethane	96.3	0	70-130		%Rec	1	2/25/2016 8:01:02 PM	R32418
Surr: Toluene-d8	105	0	70-130		%Rec	1	2/25/2016 8:01:02 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 11:00:00 AM

Lab ID: 1602A45-002

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	2/25/2016 7:13:19 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/25/2016 7:13:19 PM	23932
Surr: DNOP	134	0	70-141		%Rec	1	2/25/2016 7:13:19 PM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 4:35:19 PM	R32416
Surr: BFB	83.9	0	49.5-130		%Rec	1	2/25/2016 4:35:19 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.96	0.023	0.10		mg/L	1	2/25/2016 10:08:48 PM	R32424
Chloride	91	0.55	10		mg/L	20	2/25/2016 10:21:12 PM	R32424
Bromide	0.46	0.032	0.10		mg/L	1	2/25/2016 10:08:48 PM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/25/2016 10:08:48 PM	R32424
Sulfate	640	1.3	10		mg/L	20	2/25/2016 10:21:12 PM	R32424
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	2/29/2016 2:33:59 PM	R32480
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.032	0.0013	0.0020		mg/L	1	3/2/2016 3:51:46 PM	A32539
Cadmium	ND	0.00075	0.0020		mg/L	1	3/2/2016 3:51:46 PM	A32539
Calcium	68	0.26	1.0		mg/L	1	3/2/2016 3:51:46 PM	A32539
Chromium	ND	0.0018	0.0060		mg/L	1	3/2/2016 3:51:46 PM	A32539
Copper	ND	0.0040	0.0060		mg/L	1	3/2/2016 3:51:46 PM	A32539
Iron	0.059	0.0091	0.020		mg/L	1	3/2/2016 3:51:46 PM	A32539
Magnesium	9.8	0.013	1.0		mg/L	1	3/2/2016 3:51:46 PM	A32539
Manganese	0.50	0.00032	0.0020	*	mg/L	1	3/2/2016 3:51:46 PM	A32539
Potassium	0.40	0.18	1.0	J	mg/L	1	3/2/2016 3:51:46 PM	A32539
Silver	ND	0.0028	0.0050		mg/L	1	3/2/2016 3:51:46 PM	A32539
Sodium	560	0.96	10		mg/L	10	3/9/2016 3:45:30 PM	B32673
Zinc	0.012	0.0028	0.010		mg/L	1	3/2/2016 3:51:46 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.062	0.0011	0.0020		mg/L	1	3/2/2016 3:11:34 PM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/2/2016 3:11:34 PM	23939
Chromium	ND	0.0022	0.0060		mg/L	1	3/2/2016 3:11:34 PM	23939
Copper	ND	0.0051	0.0060		mg/L	1	3/2/2016 3:11:34 PM	23939
Iron	0.90	0.0072	0.020	*	mg/L	1	3/2/2016 3:11:34 PM	23939
Manganese	0.51	0.0015	0.0020	*	mg/L	1	3/2/2016 3:11:34 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/2/2016 3:11:34 PM	23939
Zinc	0.0044	0.0039	0.010	J	mg/L	1	3/7/2016 2:41:14 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0012	0.000065	0.0010		mg/L	1	3/10/2016 4:49:09 PM	B32730

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	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 11:00:00 AM

Lab ID: 1602A45-002

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.000097	0.000026	0.00050	J	mg/L	1	3/10/2016 4:49:09 PM	B32730
Selenium	0.0013	0.00019	0.0010		mg/L	1	3/10/2016 4:49:09 PM	B32730
Uranium	0.015	0.0000048	0.00050		mg/L	1	3/10/2016 4:49:09 PM	B32730
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0013	0.00029	0.0010		mg/L	1	3/9/2016 2:41:07 PM	24075
Lead	0.00070	0.000047	0.00050		mg/L	1	3/9/2016 2:41:07 PM	24075
Selenium	0.0010	0.00062	0.0050	J	mg/L	5	3/9/2016 3:41:27 PM	24075
Uranium	0.014	0.0000049	0.00050		mg/L	1	3/9/2016 2:41:07 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000061	0.000053	0.00020	J	mg/L	1	2/26/2016 12:44:00 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 4:12:18 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 4:12:18 PM	23981

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

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	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 11:00:00 AM

Lab ID: 1602A45-002

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 4:12:18 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 4:12:18 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 4:12:18 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 4:12:18 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 4:12:18 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 4:12:18 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 4:12:18 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 4:12:18 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 4:12:18 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 11:00:00 AM

Lab ID: 1602A45-002

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 4:12:18 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 4:12:18 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 4:12:18 PM	23981
Surr: 2-Fluorophenol	57.9	0	4.63-113		%Rec	1	3/2/2016 4:12:18 PM	23981
Surr: Phenol-d5	41.3	0	4.13-124		%Rec	1	3/2/2016 4:12:18 PM	23981
Surr: 2,4,6-Tribromophenol	64.3	0	5.14-132		%Rec	1	3/2/2016 4:12:18 PM	23981
Surr: Nitrobenzene-d5	84.5	0	9.13-140		%Rec	1	3/2/2016 4:12:18 PM	23981
Surr: 2-Fluorobiphenyl	87.3	0	10.8-132		%Rec	1	3/2/2016 4:12:18 PM	23981
Surr: 4-Terphenyl-d14	121	0	12.9-107	S	%Rec	1	3/2/2016 4:12:18 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Methyl tert-butyl ether (MTBE)	12	0.21	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Acetone	ND	0.88	10		µg/L	1	2/25/2016 8:29:22 PM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/25/2016 8:29:22 PM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/25/2016 8:29:22 PM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Chloroform	ND	0.089	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 11:00:00 AM

Lab ID: 1602A45-002

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1-Dichloroethane	0.30	0.11	1.0	J	µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/25/2016 8:29:22 PM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/25/2016 8:29:22 PM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/25/2016 8:29:22 PM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/25/2016 8:29:22 PM	R32418
Surr: 1,2-Dichloroethane-d4	95.4	0	70-130		%Rec	1	2/25/2016 8:29:22 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 11:00:00 AM

Lab ID: 1602A45-002

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	110	0	70-130		%Rec	1	2/25/2016 8:29:22 PM	R32418
Surr: Dibromofluoromethane	96.1	0	70-130		%Rec	1	2/25/2016 8:29:22 PM	R32418
Surr: Toluene-d8	106	0	70-130		%Rec	1	2/25/2016 8:29:22 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 12:25:00 PM

Lab ID: 1602A45-003

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE								
							Analyst: KJH	
Diesel Range Organics (DRO)	1.1	0.69	1.0		mg/L	1	2/26/2016 1:13:42 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/26/2016 1:13:42 PM	23932
Surr: DNOP	94.4	0	70-141		%Rec	1	2/26/2016 1:13:42 PM	23932
EPA METHOD 8015D: GASOLINE RANGE								
							Analyst: NSB	
Gasoline Range Organics (GRO)	14	0.51	1.0		mg/L	20	2/25/2016 4:59:51 PM	R32416
Surr: BFB	99.4	0	49.5-130		%Rec	20	2/25/2016 4:59:51 PM	R32416
EPA METHOD 300.0: ANIONS								
							Analyst: LGT	
Fluoride	0.12	0.023	0.10		mg/L	1	2/25/2016 10:58:27 PM	R32424
Chloride	670	1.4	25		mg/L	50	3/1/2016 5:05:02 PM	R32498
Bromide	ND	0.032	0.10		mg/L	1	2/25/2016 10:58:27 PM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/25/2016 10:58:27 PM	R32424
Sulfate	31	1.3	10		mg/L	20	2/25/2016 11:10:51 PM	R32424
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	2/29/2016 2:46:24 PM	R32480
EPA METHOD 200.7: DISSOLVED METALS								
							Analyst: ELS	
Barium	0.28	0.0013	0.0020		mg/L	1	3/2/2016 3:55:49 PM	A32539
Cadmium	ND	0.00075	0.0020		mg/L	1	3/2/2016 3:55:49 PM	A32539
Calcium	120	1.3	5.0		mg/L	5	3/2/2016 3:57:43 PM	A32539
Chromium	ND	0.0018	0.0060		mg/L	1	3/2/2016 3:55:49 PM	A32539
Copper	ND	0.0040	0.0060		mg/L	1	3/2/2016 3:55:49 PM	A32539
Iron	0.46	0.0091	0.020	*	mg/L	1	3/2/2016 3:55:49 PM	A32539
Magnesium	23	0.013	1.0		mg/L	1	3/2/2016 3:55:49 PM	A32539
Manganese	2.9	0.0016	0.010	*	mg/L	5	3/2/2016 3:57:43 PM	A32539
Potassium	0.91	0.18	1.0	J	mg/L	1	3/2/2016 3:55:49 PM	A32539
Silver	ND	0.0028	0.0050		mg/L	1	3/2/2016 3:55:49 PM	A32539
Sodium	640	0.96	10		mg/L	10	3/9/2016 3:47:26 PM	B32673
Zinc	0.013	0.0028	0.010		mg/L	1	3/2/2016 3:55:49 PM	A32539
EPA METHOD 200.7: TOTAL METALS								
							Analyst: ELS	
Barium	0.31	0.0011	0.0020		mg/L	1	3/2/2016 3:20:05 PM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/2/2016 3:20:05 PM	23939
Chromium	ND	0.0022	0.0060		mg/L	1	3/2/2016 3:20:05 PM	23939
Copper	ND	0.0051	0.0060		mg/L	1	3/2/2016 3:20:05 PM	23939
Iron	1.4	0.036	0.10	*	mg/L	5	3/9/2016 3:17:19 PM	23939
Manganese	3.1	0.0076	0.010	*	mg/L	5	3/9/2016 3:17:19 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/2/2016 3:20:05 PM	23939
Zinc	0.0048	0.0039	0.010	J	mg/L	1	3/7/2016 3:00:59 PM	24075
EPA 200.8: DISSOLVED METALS								
							Analyst: JLF	
Arsenic	0.0036	0.000065	0.0010		mg/L	1	3/10/2016 4:52:12 PM	B32730

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 12:25:00 PM

Lab ID: 1602A45-003

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.00027	0.000026	0.00050	J	mg/L	1	3/10/2016 4:52:12 PM	B32730
Selenium	0.0033	0.00097	0.0050	J	mg/L	5	3/15/2016 3:25:20 PM	B32805
Uranium	0.030	0.000024	0.0025		mg/L	5	3/15/2016 3:25:20 PM	B32805
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0028	0.00029	0.0010		mg/L	1	3/9/2016 2:44:08 PM	24075
Lead	0.0028	0.000047	0.00050		mg/L	1	3/9/2016 2:44:08 PM	24075
Selenium	0.0024	0.00062	0.0050	J	mg/L	5	3/9/2016 3:44:28 PM	24075
Uranium	0.029	0.000025	0.0025		mg/L	5	3/9/2016 3:44:28 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000071	0.000053	0.00020	J	mg/L	1	2/26/2016 12:46:04 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 4:42:17 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 4:42:17 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 12:25:00 PM

Lab ID: 1602A45-003

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 4:42:17 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 4:42:17 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 4:42:17 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 4:42:17 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 4:42:17 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 4:42:17 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 4:42:17 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 4:42:17 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 4:42:17 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 12:25:00 PM

Lab ID: 1602A45-003

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 4:42:17 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 4:42:17 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 4:42:17 PM	23981
Surr: 2-Fluorophenol	53.7	0	4.63-113		%Rec	1	3/2/2016 4:42:17 PM	23981
Surr: Phenol-d5	38.9	0	4.13-124		%Rec	1	3/2/2016 4:42:17 PM	23981
Surr: 2,4,6-Tribromophenol	75.0	0	5.14-132		%Rec	1	3/2/2016 4:42:17 PM	23981
Surr: Nitrobenzene-d5	77.1	0	9.13-140		%Rec	1	3/2/2016 4:42:17 PM	23981
Surr: 2-Fluorobiphenyl	89.5	0	10.8-132		%Rec	1	3/2/2016 4:42:17 PM	23981
Surr: 4-Terphenyl-d14	97.8	0	12.9-107		%Rec	1	3/2/2016 4:42:17 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	1200	4.8	50		µg/L	50	2/25/2016 8:57:35 PM	R32418
Toluene	11	0.45	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Ethylbenzene	190	0.56	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Methyl tert-butyl ether (MTBE)	200	1.1	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2,4-Trimethylbenzene	3.0	0.52	5.0	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
1,3,5-Trimethylbenzene	ND	0.58	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2-Dichloroethane (EDC)	13	0.26	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.56	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Naphthalene	7.0	0.42	10	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
1-Methylnaphthalene	4.5	1.0	20	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
2-Methylnaphthalene	ND	0.79	20		µg/L	5	2/25/2016 9:25:59 PM	R32418
Acetone	ND	4.4	50		µg/L	5	2/25/2016 9:25:59 PM	R32418
Bromobenzene	ND	0.40	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Bromodichloromethane	ND	0.49	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Bromoform	ND	0.51	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Bromomethane	ND	3.9	15		µg/L	5	2/25/2016 9:25:59 PM	R32418
2-Butanone	ND	1.6	50		µg/L	5	2/25/2016 9:25:59 PM	R32418
Carbon disulfide	ND	3.0	50		µg/L	5	2/25/2016 9:25:59 PM	R32418
Carbon Tetrachloride	ND	0.54	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Chlorobenzene	ND	0.52	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Chloroethane	ND	0.73	10		µg/L	5	2/25/2016 9:25:59 PM	R32418
Chloroform	ND	0.44	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Chloromethane	ND	1.1	15		µg/L	5	2/25/2016 9:25:59 PM	R32418
2-Chlorotoluene	ND	2.0	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
4-Chlorotoluene	ND	0.64	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
cis-1,2-DCE	45	0.62	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
cis-1,3-Dichloropropene	ND	0.50	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 12:25:00 PM

Lab ID: 1602A45-003

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.77	10		µg/L	5	2/25/2016 9:25:59 PM	R32418
Dibromochloromethane	ND	0.43	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Dibromomethane	ND	0.60	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2-Dichlorobenzene	ND	2.0	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,3-Dichlorobenzene	ND	0.72	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,4-Dichlorobenzene	ND	0.71	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Dichlorodifluoromethane	ND	1.6	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1-Dichloroethane	300	0.54	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1-Dichloroethene	120	0.38	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2-Dichloropropane	ND	0.24	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,3-Dichloropropane	ND	0.78	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
2,2-Dichloropropane	ND	0.60	10		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1-Dichloropropene	ND	0.67	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Hexachlorobutadiene	ND	0.99	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
2-Hexanone	ND	1.8	50		µg/L	5	2/25/2016 9:25:59 PM	R32418
Isopropylbenzene	47	0.49	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
4-Isopropyltoluene	ND	0.70	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
4-Methyl-2-pentanone	ND	0.75	50		µg/L	5	2/25/2016 9:25:59 PM	R32418
Methylene Chloride	ND	0.31	15		µg/L	5	2/25/2016 9:25:59 PM	R32418
n-Butylbenzene	16	0.80	15		µg/L	5	2/25/2016 9:25:59 PM	R32418
n-Propylbenzene	55	0.66	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
sec-Butylbenzene	5.6	0.54	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Styrene	ND	0.48	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
tert-Butylbenzene	ND	0.48	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.56	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.53	10		µg/L	5	2/25/2016 9:25:59 PM	R32418
Tetrachloroethene (PCE)	2.3	0.76	5.0	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
trans-1,2-DCE	ND	2.0	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
trans-1,3-Dichloropropene	ND	0.42	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2,3-Trichlorobenzene	ND	0.56	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2,4-Trichlorobenzene	ND	0.66	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1,1-Trichloroethane	46	0.32	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,1,2-Trichloroethane	1.4	0.38	5.0	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
Trichloroethene (TCE)	29	0.88	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
Trichlorofluoromethane	ND	0.44	5.0		µg/L	5	2/25/2016 9:25:59 PM	R32418
1,2,3-Trichloropropane	ND	0.56	10		µg/L	5	2/25/2016 9:25:59 PM	R32418
Vinyl chloride	3.4	0.32	5.0	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
Xylenes, Total	6.4	1.6	7.5	J	µg/L	5	2/25/2016 9:25:59 PM	R32418
Surr: 1,2-Dichloroethane-d4	93.4	0	70-130		%Rec	5	2/25/2016 9:25:59 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 12:25:00 PM

Lab ID: 1602A45-003

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	106	0	70-130		%Rec	5	2/25/2016 9:25:59 PM	R32418
Surr: Dibromofluoromethane	93.4	0	70-130		%Rec	5	2/25/2016 9:25:59 PM	R32418
Surr: Toluene-d8	106	0	70-130		%Rec	5	2/25/2016 9:25:59 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1602A45-004

Matrix: TRIP BLANK

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 5:24:17 PM	R32416
Surr: BFB	83.9	0	49.5-130		%Rec	1	2/25/2016 5:24:17 PM	R32416
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2-Dichloroethane (EDC)	ND	0.053	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Acetone	ND	0.88	10		µg/L	1	2/25/2016 11:47:39 PM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/25/2016 11:47:39 PM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/25/2016 11:47:39 PM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Chloroform	ND	0.089	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: TRIP BLANK

Project: Quarterly GW Sampling

Collection Date:

Lab ID: 1602A45-004

Matrix: TRIP BLANK

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/25/2016 11:47:39 PM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/25/2016 11:47:39 PM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/25/2016 11:47:39 PM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/25/2016 11:47:39 PM	R32418
Surr: 1,2-Dichloroethane-d4	95.1	0	70-130		%Rec	1	2/25/2016 11:47:39 PM	R32418
Surr: 4-Bromofluorobenzene	109	0	70-130		%Rec	1	2/25/2016 11:47:39 PM	R32418
Surr: Dibromofluoromethane	96.2	0	70-130		%Rec	1	2/25/2016 11:47:39 PM	R32418
Surr: Toluene-d8	102	0	70-130		%Rec	1	2/25/2016 11:47:39 PM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 1:45:00 PM

Lab ID: 1602A45-005

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	2/25/2016 7:56:29 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/25/2016 7:56:29 PM	23932
Surr: DNOP	151	0	70-141	S	%Rec	1	2/25/2016 7:56:29 PM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	0.10	0.025	0.050		mg/L	1	2/25/2016 5:48:45 PM	R32416
Surr: BFB	91.7	0	49.5-130		%Rec	1	2/25/2016 5:48:45 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	ND	0.023	0.10		mg/L	1	2/25/2016 11:23:16 PM	R32424
Chloride	830	2.7	50		mg/L	100	3/1/2016 5:17:26 PM	R32498
Bromide	3.0	0.65	2.0		mg/L	20	2/25/2016 11:35:41 PM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/25/2016 11:23:16 PM	R32424
Sulfate	68	1.3	10		mg/L	20	2/25/2016 11:35:41 PM	R32424
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	2/29/2016 2:58:48 PM	R32480
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.12	0.0013	0.0020		mg/L	1	3/2/2016 3:59:45 PM	A32539
Cadmium	ND	0.00075	0.0020		mg/L	1	3/2/2016 3:59:45 PM	A32539
Calcium	160	1.3	5.0		mg/L	5	3/2/2016 4:01:42 PM	A32539
Chromium	ND	0.0018	0.0060		mg/L	1	3/2/2016 3:59:45 PM	A32539
Copper	ND	0.0040	0.0060		mg/L	1	3/2/2016 3:59:45 PM	A32539
Iron	0.011	0.0091	0.020	J	mg/L	1	3/2/2016 3:59:45 PM	A32539
Magnesium	35	0.013	1.0		mg/L	1	3/2/2016 3:59:45 PM	A32539
Manganese	0.020	0.00032	0.0020		mg/L	1	3/2/2016 3:59:45 PM	A32539
Potassium	1.2	0.18	1.0		mg/L	1	3/2/2016 3:59:45 PM	A32539
Silver	ND	0.0028	0.0050		mg/L	1	3/2/2016 3:59:45 PM	A32539
Sodium	560	0.96	10		mg/L	10	3/9/2016 3:49:33 PM	B32673
Zinc	0.010	0.0028	0.010		mg/L	1	3/2/2016 3:59:45 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.18	0.0011	0.0020		mg/L	1	3/2/2016 3:22:03 PM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/2/2016 3:22:03 PM	23939
Chromium	0.0023	0.0022	0.0060	J	mg/L	1	3/2/2016 3:22:03 PM	23939
Copper	ND	0.0051	0.0060		mg/L	1	3/2/2016 3:22:03 PM	23939
Iron	2.5	0.036	0.10	*	mg/L	5	3/9/2016 3:19:15 PM	23939
Manganese	0.13	0.0015	0.0020	*	mg/L	1	3/2/2016 3:22:03 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/2/2016 3:22:03 PM	23939
Zinc	0.011	0.0039	0.010		mg/L	1	3/7/2016 3:04:54 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0014	0.00032	0.0050	J	mg/L	5	3/15/2016 3:31:26 PM	B32805

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 1:45:00 PM

Lab ID: 1602A45-005

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.000084	0.000026	0.00050	J	mg/L	1	3/15/2016 3:28:23 PM	B32805
Selenium	0.0036	0.00097	0.0050	J	mg/L	5	3/15/2016 3:31:26 PM	B32805
Uranium	0.046	0.000024	0.0025	*	mg/L	5	3/15/2016 3:31:26 PM	B32805
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	ND	0.0015	0.0050		mg/L	5	3/9/2016 3:50:29 PM	24075
Lead	0.0036	0.000047	0.00050		mg/L	1	3/9/2016 2:50:09 PM	24075
Selenium	0.0026	0.00062	0.0050	J	mg/L	5	3/9/2016 3:50:29 PM	24075
Uranium	0.045	0.000025	0.0025	*	mg/L	5	3/9/2016 3:50:29 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000068	0.000053	0.00020	J	mg/L	1	2/26/2016 12:52:25 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 5:12:04 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 5:12:04 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 1:45:00 PM

Lab ID: 1602A45-005

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 5:12:04 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 5:12:04 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 5:12:04 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 5:12:04 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 5:12:04 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 5:12:04 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 5:12:04 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 5:12:04 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 5:12:04 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 1:45:00 PM

Lab ID: 1602A45-005

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 5:12:04 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 5:12:04 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 5:12:04 PM	23981
Surr: 2-Fluorophenol	38.5	0	4.63-113		%Rec	1	3/2/2016 5:12:04 PM	23981
Surr: Phenol-d5	34.3	0	4.13-124		%Rec	1	3/2/2016 5:12:04 PM	23981
Surr: 2,4,6-Tribromophenol	27.1	0	5.14-132		%Rec	1	3/2/2016 5:12:04 PM	23981
Surr: Nitrobenzene-d5	77.8	0	9.13-140		%Rec	1	3/2/2016 5:12:04 PM	23981
Surr: 2-Fluorobiphenyl	81.2	0	10.8-132		%Rec	1	3/2/2016 5:12:04 PM	23981
Surr: 4-Terphenyl-d14	95.4	0	12.9-107		%Rec	1	3/2/2016 5:12:04 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	0.62	0.096	1.0	J	µg/L	1	2/26/2016 12:15:58 AM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Methyl tert-butyl ether (MTBE)	61	0.21	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2-Dichloroethane (EDC)	23	0.053	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Acetone	ND	0.88	10		µg/L	1	2/26/2016 12:15:58 AM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/26/2016 12:15:58 AM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/26/2016 12:15:58 AM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Chloroform	0.40	0.089	1.0	J	µg/L	1	2/26/2016 12:15:58 AM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
cis-1,2-DCE	1.6	0.12	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 1:45:00 PM

Lab ID: 1602A45-005

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1-Dichloroethane	34	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1-Dichloroethene	57	0.38	5.0		µg/L	5	2/26/2016 11:49:44 AM	R32445
1,2-Dichloropropane	0.20	0.047	1.0	J	µg/L	1	2/26/2016 12:15:58 AM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/26/2016 12:15:58 AM	R32418
Isopropylbenzene	0.84	0.098	1.0	J	µg/L	1	2/26/2016 12:15:58 AM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/26/2016 12:15:58 AM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1,1-Trichloroethane	5.6	0.063	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,1,2-Trichloroethane	2.4	0.077	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Trichloroethene (TCE)	3.6	0.18	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/26/2016 12:15:58 AM	R32418
Vinyl chloride	0.26	0.063	1.0	J	µg/L	1	2/26/2016 12:15:58 AM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/26/2016 12:15:58 AM	R32418
Surr: 1,2-Dichloroethane-d4	101	0	70-130		%Rec	1	2/26/2016 12:15:58 AM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 1:45:00 PM

Lab ID: 1602A45-005

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Surr: 4-Bromofluorobenzene	106	0	70-130		%Rec	1	2/26/2016 12:15:58 AM	R32418
Surr: Dibromofluoromethane	98.2	0	70-130		%Rec	1	2/26/2016 12:15:58 AM	R32418
Surr: Toluene-d8	105	0	70-130		%Rec	1	2/26/2016 12:15:58 AM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 2:50:00 PM

Lab ID: 1602A45-006

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: KJH	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	2/25/2016 8:18:04 PM	23932
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	2/25/2016 8:18:04 PM	23932
Surr: DNOP	157	0	70-141	S	%Rec	1	2/25/2016 8:18:04 PM	23932
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	2/25/2016 6:13:07 PM	R32416
Surr: BFB	87.5	0	49.5-130		%Rec	1	2/25/2016 6:13:07 PM	R32416
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	ND	0.023	0.10		mg/L	1	2/25/2016 11:48:05 PM	R32424
Chloride	4900	14	250		mg/L	500	3/1/2016 5:29:51 PM	R32498
Bromide	6.6	0.65	2.0		mg/L	20	2/26/2016 12:00:30 AM	R32424
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	2/25/2016 11:48:05 PM	R32424
Sulfate	520	1.3	10		mg/L	20	2/26/2016 12:00:30 AM	R32424
Nitrate+Nitrite as N	ND	4.2	10		mg/L	50	3/8/2016 6:36:25 PM	A32663
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.064	0.0013	0.0020		mg/L	1	3/2/2016 4:03:39 PM	A32539
Cadmium	ND	0.00075	0.0020		mg/L	1	3/2/2016 4:03:39 PM	A32539
Calcium	350	1.3	5.0		mg/L	5	3/2/2016 4:11:52 PM	A32539
Chromium	ND	0.0018	0.0060		mg/L	1	3/2/2016 4:03:39 PM	A32539
Copper	ND	0.0040	0.0060		mg/L	1	3/2/2016 4:03:39 PM	A32539
Iron	0.093	0.0091	0.020		mg/L	1	3/2/2016 4:03:39 PM	A32539
Magnesium	68	0.013	1.0		mg/L	1	3/2/2016 4:03:39 PM	A32539
Manganese	0.041	0.00032	0.0020		mg/L	1	3/2/2016 4:03:39 PM	A32539
Potassium	8.1	0.18	1.0		mg/L	1	3/2/2016 4:03:39 PM	A32539
Silver	ND	0.0028	0.0050		mg/L	1	3/2/2016 4:03:39 PM	A32539
Sodium	2500	4.8	50		mg/L	50	3/9/2016 3:51:40 PM	B32673
Zinc	0.016	0.0028	0.010		mg/L	1	3/2/2016 4:03:39 PM	A32539
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.14	0.0011	0.0020		mg/L	1	3/2/2016 3:23:43 PM	23939
Cadmium	ND	0.00062	0.0020		mg/L	1	3/2/2016 3:23:43 PM	23939
Chromium	ND	0.0022	0.0060		mg/L	1	3/2/2016 3:23:43 PM	23939
Copper	ND	0.0051	0.0060		mg/L	1	3/2/2016 3:23:43 PM	23939
Iron	2.0	0.036	0.10	*	mg/L	5	3/9/2016 3:21:11 PM	23939
Manganese	0.17	0.0015	0.0020	*	mg/L	1	3/2/2016 3:23:43 PM	23939
Silver	ND	0.0021	0.0050		mg/L	1	3/2/2016 3:23:43 PM	23939
Zinc	0.0099	0.0039	0.010	J	mg/L	1	3/7/2016 3:08:34 PM	24075
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	ND	0.010	0.010		mg/L	10	3/15/2016 4:05:08 PM	B32805

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 2:50:00 PM

Lab ID: 1602A45-006

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.00053	0.00013	0.0025	J	mg/L	5	3/15/2016 3:43:44 PM	B32805
Selenium	ND	0.010	0.010		mg/L	10	3/15/2016 4:05:08 PM	B32805
Uranium	0.077	0.000024	0.0025	*	mg/L	5	3/15/2016 3:43:44 PM	B32805
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	ND	0.0015	0.0050		mg/L	5	3/9/2016 3:59:31 PM	24075
Lead	0.0026	0.00024	0.0025		mg/L	5	3/9/2016 3:59:31 PM	24075
Selenium	0.0031	0.00062	0.0050	J	mg/L	5	3/9/2016 3:59:31 PM	24075
Uranium	0.064	0.000025	0.0025	*	mg/L	5	3/9/2016 3:59:31 PM	24075
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000068	0.000053	0.00020	J	mg/L	1	2/26/2016 12:54:30 PM	23952
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Acenaphthene	ND	8.0	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Acenaphthylene	ND	7.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Aniline	ND	9.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Anthracene	ND	6.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Azobenzene	ND	9.3	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Benz(a)anthracene	ND	6.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Benzo(a)pyrene	ND	6.3	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Benzo(b)fluoranthene	ND	6.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Benzo(g,h,i)perylene	ND	6.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Benzo(k)fluoranthene	ND	7.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Benzoic acid	ND	9.8	20		µg/L	1	3/2/2016 5:41:44 PM	23981
Benzyl alcohol	ND	8.0	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Bis(2-chloroethoxy)methane	ND	7.3	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Bis(2-chloroethyl)ether	ND	8.3	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Bis(2-chloroisopropyl)ether	ND	9.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Bis(2-ethylhexyl)phthalate	ND	7.5	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4-Bromophenyl phenyl ether	ND	8.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Butyl benzyl phthalate	ND	7.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Carbazole	ND	7.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4-Chloro-3-methylphenol	ND	8.0	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4-Chloroaniline	ND	7.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2-Chloronaphthalene	ND	7.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2-Chlorophenol	ND	8.7	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4-Chlorophenyl phenyl ether	ND	8.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Chrysene	ND	6.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Di-n-butyl phthalate	ND	8.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Di-n-octyl phthalate	ND	6.3	10		µg/L	1	3/2/2016 5:41:44 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 2:50:00 PM

Lab ID: 1602A45-006

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Dibenz(a,h)anthracene	ND	6.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Dibenzofuran	ND	8.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
1,2-Dichlorobenzene	ND	6.4	10		µg/L	1	3/2/2016 5:41:44 PM	23981
1,3-Dichlorobenzene	ND	6.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
1,4-Dichlorobenzene	ND	6.3	10		µg/L	1	3/2/2016 5:41:44 PM	23981
3,3'-Dichlorobenzidine	ND	4.7	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Diethyl phthalate	ND	8.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Dimethyl phthalate	ND	7.5	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2,4-Dichlorophenol	ND	7.6	20		µg/L	1	3/2/2016 5:41:44 PM	23981
2,4-Dimethylphenol	ND	4.7	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4,6-Dinitro-2-methylphenol	ND	7.3	20		µg/L	1	3/2/2016 5:41:44 PM	23981
2,4-Dinitrophenol	ND	9.9	20		µg/L	1	3/2/2016 5:41:44 PM	23981
2,4-Dinitrotoluene	ND	8.5	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2,6-Dinitrotoluene	ND	7.5	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Fluoranthene	ND	6.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Fluorene	ND	7.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Hexachlorobenzene	ND	7.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Hexachlorobutadiene	ND	5.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Hexachlorocyclopentadiene	ND	5.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Hexachloroethane	ND	5.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Indeno(1,2,3-cd)pyrene	ND	5.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Isophorone	ND	8.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
1-Methylnaphthalene	ND	6.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2-Methylnaphthalene	ND	7.0	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2-Methylphenol	ND	8.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
3+4-Methylphenol	ND	7.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
N-Nitrosodi-n-propylamine	ND	7.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
N-Nitrosodimethylamine	ND	9.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
N-Nitrosodiphenylamine	ND	6.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Naphthalene	ND	5.9	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2-Nitroaniline	ND	9.0	10		µg/L	1	3/2/2016 5:41:44 PM	23981
3-Nitroaniline	ND	8.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4-Nitroaniline	ND	9.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Nitrobenzene	ND	7.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2-Nitrophenol	ND	7.6	10		µg/L	1	3/2/2016 5:41:44 PM	23981
4-Nitrophenol	ND	6.7	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Pentachlorophenol	ND	7.6	20		µg/L	1	3/2/2016 5:41:44 PM	23981
Phenanthrene	ND	6.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Phenol	ND	5.1	10		µg/L	1	3/2/2016 5:41:44 PM	23981

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

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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1602A45

Date Reported: 3/31/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 2:50:00 PM

Lab ID: 1602A45-006

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: DAM	
Pyrene	ND	5.5	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Pyridine	ND	6.7	10		µg/L	1	3/2/2016 5:41:44 PM	23981
1,2,4-Trichlorobenzene	ND	6.2	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2,4,5-Trichlorophenol	ND	8.4	10		µg/L	1	3/2/2016 5:41:44 PM	23981
2,4,6-Trichlorophenol	ND	8.8	10		µg/L	1	3/2/2016 5:41:44 PM	23981
Surr: 2-Fluorophenol	51.5	0	4.63-113		%Rec	1	3/2/2016 5:41:44 PM	23981
Surr: Phenol-d5	37.7	0	4.13-124		%Rec	1	3/2/2016 5:41:44 PM	23981
Surr: 2,4,6-Tribromophenol	49.0	0	5.14-132		%Rec	1	3/2/2016 5:41:44 PM	23981
Surr: Nitrobenzene-d5	74.2	0	9.13-140		%Rec	1	3/2/2016 5:41:44 PM	23981
Surr: 2-Fluorobiphenyl	74.0	0	10.8-132		%Rec	1	3/2/2016 5:41:44 PM	23981
Surr: 4-Terphenyl-d14	87.5	0	12.9-107		%Rec	1	3/2/2016 5:41:44 PM	23981
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
Benzene	ND	0.096	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Toluene	ND	0.089	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Ethylbenzene	ND	0.11	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Methyl tert-butyl ether (MTBE)	0.61	0.21	1.0	J	µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2,4-Trimethylbenzene	ND	0.10	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2-Dichloroethane (EDC)	0.37	0.053	1.0	J	µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Naphthalene	ND	0.083	2.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Acetone	ND	0.88	10		µg/L	1	2/26/2016 12:44:12 AM	R32418
Bromobenzene	ND	0.080	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Bromodichloromethane	ND	0.098	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Bromoform	ND	0.10	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Bromomethane	ND	0.78	3.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
2-Butanone	ND	0.32	10		µg/L	1	2/26/2016 12:44:12 AM	R32418
Carbon disulfide	ND	0.60	10		µg/L	1	2/26/2016 12:44:12 AM	R32418
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Chlorobenzene	ND	0.10	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Chloroethane	ND	0.15	2.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Chloroform	0.19	0.089	1.0	J	µg/L	1	2/26/2016 12:44:12 AM	R32418
Chloromethane	ND	0.21	3.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
cis-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: Quarterly GW Sampling

Collection Date: 2/23/2016 2:50:00 PM

Lab ID: 1602A45-006

Matrix: AQUEOUS

Received Date: 2/25/2016 8:16:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: DJF	
1,2-Dibromo-3-chloropropane	ND	0.15	2.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Dibromochloromethane	ND	0.087	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Dibromomethane	ND	0.12	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Dichlorodifluoromethane	ND	0.32	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1-Dichloroethane	0.82	0.11	1.0	J	µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1-Dichloroethene	ND	0.076	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2-Dichloropropane	ND	0.047	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
2,2-Dichloropropane	ND	0.12	2.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
2-Hexanone	ND	0.36	10		µg/L	1	2/26/2016 12:44:12 AM	R32418
Isopropylbenzene	ND	0.098	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
4-Methyl-2-pentanone	ND	0.15	10		µg/L	1	2/26/2016 12:44:12 AM	R32418
Methylene Chloride	ND	0.063	3.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
n-Butylbenzene	ND	0.16	3.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
n-Propylbenzene	ND	0.13	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
sec-Butylbenzene	ND	0.11	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Styrene	ND	0.095	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
tert-Butylbenzene	ND	0.096	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1,2,2-Tetrachloroethane	ND	0.11	2.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
trans-1,3-Dichloropropene	ND	0.085	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1,1-Trichloroethane	ND	0.063	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,1,2-Trichloroethane	ND	0.077	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Trichlorofluoromethane	ND	0.088	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
1,2,3-Trichloropropane	ND	0.11	2.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Vinyl chloride	ND	0.063	1.0		µg/L	1	2/26/2016 12:44:12 AM	R32418
Xylenes, Total	ND	0.32	1.5		µg/L	1	2/26/2016 12:44:12 AM	R32418
Surr: 1,2-Dichloroethane-d4	94.9	0	70-130		%Rec	1	2/26/2016 12:44:12 AM	R32418

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