

AP - 111

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

2016

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606390

27-Jun-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR

Sample ID 5ML RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBW	Batch ID: A34874		RunNo: 34874							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1076985		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	22		20.00		109	66.4	120			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSW	Batch ID: A34874		RunNo: 34874							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1076986		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.42	0.050	0.5000	0	84.9	80	120			
Surr: BFB	23		20.00		115	66.4	120			

Sample ID 1606390-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: STP1-EP2	Batch ID: A34874		RunNo: 34874							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1076988		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	2.8	0.25	2.500	0	110	70	130			D
Surr: BFB	120		100.0		122	66.4	120			SD

Sample ID 1606390-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: STP1-EP2	Batch ID: A34874		RunNo: 34874							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1076989		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	2.8	0.25	2.500	0	113	70	130	2.08	20	D
Surr: BFB	120		100.0		121	66.4	120	0	0	SD

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#: 1606390

27-Jun-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R34909			RunNo: 34909					
Prep Date:		Analysis Date: 6/14/2016			SeqNo: 1078285		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	20	1.0	20.00	0	99.5	70	130			
Chlorobenzene	20	1.0	20.00	0	99.1	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.6	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.9	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: R34909			RunNo: 34909					
Prep Date:		Analysis Date: 6/14/2016			SeqNo: 1078286		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	0.23	2.0								J
1-Methylnaphthalene	0.32	4.0								J
2-Methylnaphthalene	0.34	4.0								J
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								

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#: 1606390

27-Jun-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR

Sample ID	RB	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R34909			RunNo: 34909					
Prep Date:		Analysis Date: 6/14/2016			SeqNo: 1078286	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	1.1	10								J
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	0.17	1.0								J
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								

Qualifiers:

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WO#: 1606390

27-Jun-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR

Sample ID	RB	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R34909			RunNo: 34909					
Prep Date:		Analysis Date: 6/14/2016			SeqNo: 1078286		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.7	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130			
Surr: Toluene-d8	9.9		10.00		98.8	70	130			

Qualifiers:

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WO#: 1606390

27-Jun-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR

Sample ID	MB-25755		SampType:	MBLK		TestCode:	SM5210B: BOD			
Client ID:	PBW		Batch ID:	25755		RunNo:	35147			
Prep Date:	6/9/2016		Analysis Date:	6/14/2016		SeqNo:	1087282	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID	MB--25755		SampType:	MBLK		TestCode:	SM5210B: BOD			
Client ID:	PBW		Batch ID:	25755		RunNo:	35147			
Prep Date:	6/9/2016		Analysis Date:	6/14/2016		SeqNo:	1087283	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID	LCS-25755		SampType:	LCS		TestCode:	SM5210B: BOD			
Client ID:	LCSW		Batch ID:	25755		RunNo:	35147			
Prep Date:	6/9/2016		Analysis Date:	6/14/2016		SeqNo:	1087284	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	170	2.0	198.0	0	84.2	63	108			

Sample ID	LCSD-25755		SampType:	LCSD		TestCode:	SM5210B: BOD			
Client ID:	LCSS02		Batch ID:	25755		RunNo:	35147			
Prep Date:	6/9/2016		Analysis Date:	6/14/2016		SeqNo:	1087285	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	170	2.0	198.0	0	84.2	63	108	0	20	

Qualifiers:

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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#: 1606390

27-Jun-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR

Sample ID	MB-25764		SampType: MBLK		TestCode: SM2540C MOD: Total Dissolved Solids					
Client ID:	PBW		Batch ID: 25764		RunNo: 34843					
Prep Date:	6/9/2016		Analysis Date: 6/10/2016		SeqNo: 1075554		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-25764		SampType:	LCS		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW		Batch ID:	25764		RunNo:	34843				
Prep Date:	6/9/2016		Analysis Date:	6/10/2016		SeqNo:	1075555		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Total Dissolved Solids	1040	20.0	1000	0	104	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

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1606390

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

6/8/2016 2:18:00 PM

Completed By: Ashley Gallegos

6/8/2016 3:00:14 PM

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° C to 6.0°C

Yes ☒

No ☐

NA ☐

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

Yes ☒

No ☐

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

Yes ☒

No ☐

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

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☐

No ☐

No VOA Vials ☒

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

(Note discrepancies on chain of custody)

Yes ☒

No ☐

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

(If no, notify customer for authorization.)

Yes ☒

No ☐

of preserved
bottles checked
for pH:

(≤2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

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

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

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

A 3x3 grid with a central shaded square and four black squares at the corners.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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

July 26, 2016

Cheryl Johnson

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

RE: 2nd Qtr GW Sampling

OrderNo.: 1606613

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/11/2016 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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 1:25:00 PM

Lab ID: 1606613-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	2.1	0.69	1.0		mg/L	1	6/13/2016 11:27:52 AM	25801
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 11:27:52 AM	25801
Surr: DNOP	110	0	70-141		%Rec	1	6/13/2016 11:27:52 AM	25801
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	9.2	0.25	0.50		mg/L	10	6/16/2016 2:11:53 AM	A34934
Surr: BFB	132	0	66.4-120	S	%Rec	10	6/16/2016 2:11:53 AM	A34934
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Aniline	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 9:22:54 PM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Bis(2-ethylhexyl)phthalate	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 9:22:54 PM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Di-n-octyl phthalate	5.0	2.0	10	J	µg/L	1	6/21/2016 9:22:54 PM	25832
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 9:22:54 PM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 1:25:00 PM

Lab ID: 1606613-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 9:22:54 PM	25832
2,4-Dimethylphenol	4.4	3.0	10	J	µg/L	1	6/21/2016 9:22:54 PM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 9:22:54 PM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 9:22:54 PM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
1-Methylnaphthalene	26	2.9	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 9:22:54 PM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 9:22:54 PM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Naphthalene	62	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 9:22:54 PM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 9:22:54 PM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 9:22:54 PM	25832
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Phenol	9.8	2.0	10	J	µg/L	1	6/21/2016 9:22:54 PM	25832
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 9:22:54 PM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 9:22:54 PM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 9:22:54 PM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 1:25:00 PM

Lab ID: 1606613-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 9:22:54 PM	25832
Surr: 2-Fluorophenol	44.9	0	15-123		%Rec	1	6/21/2016 9:22:54 PM	25832
Surr: Phenol-d5	40.4	0	4.13-124		%Rec	1	6/21/2016 9:22:54 PM	25832
Surr: 2,4,6-Tribromophenol	82.9	0	18.4-134		%Rec	1	6/21/2016 9:22:54 PM	25832
Surr: Nitrobenzene-d5	73.9	0	28.8-134		%Rec	1	6/21/2016 9:22:54 PM	25832
Surr: 2-Fluorobiphenyl	76.5	0	35.9-125		%Rec	1	6/21/2016 9:22:54 PM	25832
Surr: 4-Terphenyl-d14	52.0	0	15-146		%Rec	1	6/21/2016 9:22:54 PM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	1900	4.8	50		µg/L	50	6/23/2016 8:40:00 AM	R35079
Toluene	6.0	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Ethylbenzene	520	5.6	50		µg/L	50	6/23/2016 8:40:00 AM	R35079
Methyl tert-butyl ether (MTBE)	490	11	50		µg/L	50	6/23/2016 8:40:00 AM	R35079
1,2,4-Trimethylbenzene	230	5.5	50		µg/L	50	6/23/2016 8:40:00 AM	R35079
1,3,5-Trimethylbenzene	4.6	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Naphthalene	94	1.9	40		µg/L	20	6/22/2016 1:25:00 PM	R35079
1-Methylnaphthalene	35	0.20	4.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
2-Methylnaphthalene	7.0	0.16	4.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Acetone	40	4.9	10		µg/L	1	6/22/2016 1:49:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
2-Butanone	6.4	0.74	10	J	µg/L	1	6/22/2016 1:49:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 1:49:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079

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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.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-17

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 1:25:00 PM

Lab ID: 1606613-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 1:49:00 PM	R35079
Isopropylbenzene	23	0.10	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
4-Isopropyltoluene	2.0	0.14	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 1:49:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
n-Butylbenzene	1.6	0.16	3.0	J	µg/L	1	6/22/2016 1:49:00 PM	R35079
n-Propylbenzene	43	0.13	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
sec-Butylbenzene	2.9	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 1:49:00 PM	R35079
Xylenes, Total	240	18	75		µg/L	50	6/23/2016 8:40:00 AM	R35079
Surr: 1,2-Dichloroethane-d4	90.0	0	70-130		%Rec	1	6/22/2016 1:49:00 PM	R35079
Surr: 4-Bromofluorobenzene	105	0	70-130		%Rec	1	6/22/2016 1:49:00 PM	R35079
Surr: Dibromofluoromethane	93.8	0	70-130		%Rec	1	6/22/2016 1:49:00 PM	R35079
Surr: Toluene-d8	95.6	0	70-130		%Rec	1	6/22/2016 1:49:00 PM	R35079

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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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:00:00 PM

Lab ID: 1606613-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

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	6/13/2016 11:49:19 AM	25801
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 11:49:19 AM	25801
Surr: DNOP	117	0	70-141		%Rec	1	6/13/2016 11:49:19 AM	25801
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	6/15/2016 1:22:12 AM	C34893
Surr: BFB	111	0	66.4-120		%Rec	1	6/15/2016 1:22:12 AM	C34893
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	0.52	0.023	0.10		mg/L	1	6/14/2016 3:29:31 PM	R34930
Chloride	370	0.55	10		mg/L	20	6/14/2016 3:41:55 PM	R34930
Bromide	2.0	0.032	0.10		mg/L	1	6/14/2016 3:29:31 PM	R34930
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 3:29:31 PM	R34930
Sulfate	130	1.3	10		mg/L	20	6/14/2016 3:41:55 PM	R34930
Nitrate+Nitrite as N	7.7	0.46	1.0		mg/L	5	6/27/2016 12:05:20 PM	R35229
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.10	0.0013	0.0020		mg/L	1	6/15/2016 6:03:06 PM	D34920
Cadmium	ND	0.00075	0.0020		mg/L	1	6/15/2016 6:03:06 PM	D34920
Calcium	61	0.26	1.0		mg/L	1	6/15/2016 6:03:06 PM	D34920
Chromium	ND	0.0018	0.0060		mg/L	1	6/15/2016 6:03:06 PM	D34920
Copper	ND	0.0040	0.0060		mg/L	1	6/15/2016 6:03:06 PM	D34920
Iron	0.041	0.0091	0.020		mg/L	1	6/15/2016 6:03:06 PM	D34920
Magnesium	14	0.013	1.0		mg/L	1	6/15/2016 6:03:06 PM	D34920
Manganese	0.0017	0.00032	0.0020	J	mg/L	1	6/15/2016 6:03:06 PM	D34920
Potassium	1.4	0.18	1.0		mg/L	1	6/15/2016 6:03:06 PM	D34920
Silver	ND	0.0028	0.0050		mg/L	1	6/15/2016 6:03:06 PM	D34920
Sodium	370	0.48	5.0		mg/L	5	6/15/2016 6:05:02 PM	D34920
Zinc	0.0037	0.0028	0.010	J	mg/L	1	6/15/2016 6:03:06 PM	D34920
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.15	0.0011	0.0020		mg/L	1	6/28/2016 1:19:02 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:19:02 PM	25969
Chromium	ND	0.0022	0.0060		mg/L	1	6/28/2016 1:19:02 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 1:19:02 PM	25969
Iron	2.3	0.036	0.10	*	mg/L	5	6/28/2016 1:20:42 PM	25969
Manganese	0.054	0.0015	0.0020	*	mg/L	1	6/28/2016 1:19:02 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:19:02 PM	25969
Zinc	0.024	0.0039	0.010		mg/L	1	6/28/2016 1:19:02 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0046	0.00069	0.0050	J	mg/L	5	7/6/2016 7:59:54 PM	B35457

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

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	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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:00:00 PM

Lab ID: 1606613-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	ND	0.00084	0.0025		mg/L	5	7/6/2016 7:59:54 PM	B35457
Selenium	0.018	0.0042	0.020	J	mg/L	20	7/6/2016 8:02:57 PM	B35457
Uranium	0.030	0.00026	0.0025		mg/L	5	7/6/2016 7:59:54 PM	B35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0047	0.0015	0.0050	J	mg/L	5	6/29/2016 10:45:45 AM	25969
Lead	0.0026	0.000047	0.00050		mg/L	1	6/28/2016 7:12:16 PM	25969
Selenium	0.014	0.0025	0.020	J	mg/L	20	6/29/2016 10:48:46 AM	25969
Uranium	0.032	0.000025	0.0025	*	mg/L	5	6/29/2016 10:45:45 AM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:16:06 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Aniline	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 9:51:22 PM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Bis(2-ethylhexyl)phthalate	3.4	2.6	10	J	µg/L	1	6/21/2016 9:51:22 PM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 9:51:22 PM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Di-n-octyl phthalate	5.4	2.0	10	J	µg/L	1	6/21/2016 9:51:22 PM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:00:00 PM

Lab ID: 1606613-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 9:51:22 PM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 9:51:22 PM	25832
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 9:51:22 PM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 9:51:22 PM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 9:51:22 PM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 9:51:22 PM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 9:51:22 PM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 9:51:22 PM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 9:51:22 PM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 9:51:22 PM	25832
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Phenol	ND	2.0	10		µg/L	1	6/21/2016 9:51:22 PM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:00:00 PM

Lab ID: 1606613-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 9:51:22 PM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 9:51:22 PM	25832
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 9:51:22 PM	25832
Surr: 2-Fluorophenol	32.2	0	15-123		%Rec	1	6/21/2016 9:51:22 PM	25832
Surr: Phenol-d5	30.0	0	4.13-124		%Rec	1	6/21/2016 9:51:22 PM	25832
Surr: 2,4,6-Tribromophenol	50.4	0	18.4-134		%Rec	1	6/21/2016 9:51:22 PM	25832
Surr: Nitrobenzene-d5	63.7	0	28.8-134		%Rec	1	6/21/2016 9:51:22 PM	25832
Surr: 2-Fluorobiphenyl	55.8	0	35.9-125		%Rec	1	6/21/2016 9:51:22 PM	25832
Surr: 4-Terphenyl-d14	35.2	0	15-146		%Rec	1	6/21/2016 9:51:22 PM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	0.45	0.096	1.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
Toluene	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Ethylbenzene	0.26	0.11	1.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
Methyl tert-butyl ether (MTBE)	0.58	0.21	1.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2,4-Trimethylbenzene	0.59	0.11	1.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Naphthalene	1.2	0.093	2.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
1-Methylnaphthalene	1.5	0.20	4.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
2-Methylnaphthalene	0.50	0.16	4.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
Acetone	ND	4.9	10		µg/L	1	6/22/2016 2:13:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
2-Butanone	ND	0.74	10		µg/L	1	6/22/2016 2:13:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 2:13:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:00:00 PM

Lab ID: 1606613-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1-Dichloroethane	0.24	0.11	1.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1-Dichloroethene	0.78	0.11	1.0	J	µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 2:13:00 PM	R35079
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 2:13:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Trichloroethene (TCE)	2.0	0.18	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 2:13:00 PM	R35079
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/22/2016 2:13:00 PM	R35079
Surr: 1,2-Dichloroethane-d4	91.6	0	70-130		%Rec	1	6/22/2016 2:13:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-34

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:00:00 PM

Lab ID: 1606613-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	1	6/22/2016 2:13:00 PM	R35079
Surr: Dibromofluoromethane	95.2	0	70-130		%Rec	1	6/22/2016 2:13:00 PM	R35079
Surr: Toluene-d8	96.4	0	70-130		%Rec	1	6/22/2016 2:13:00 PM	R35079

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: MKTF-18

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606613-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	1.9	0.69	1.0		mg/L	1	6/13/2016 12:11:05 PM	25801
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 12:11:05 PM	25801
Surr: DNOP	115	0	70-141		%Rec	1	6/13/2016 12:11:05 PM	25801
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	0.71	0.025	0.050		mg/L	1	6/15/2016 1:45:45 AM	C34893
Surr: BFB	150	0	66.4-120	S	%Rec	1	6/15/2016 1:45:45 AM	C34893
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	0.63	0.023	0.10		mg/L	1	6/14/2016 3:54:20 PM	R34930
Chloride	180	0.55	10		mg/L	20	6/14/2016 4:06:45 PM	R34930
Bromide	0.13	0.032	0.10		mg/L	1	6/14/2016 3:54:20 PM	R34930
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 3:54:20 PM	R34930
Sulfate	0.21	0.064	0.50	J	mg/L	1	6/14/2016 3:54:20 PM	R34930
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/15/2016 2:02:25 AM	A34930
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	1.9	0.0066	0.010		mg/L	5	6/15/2016 6:08:40 PM	D34920
Cadmium	ND	0.00075	0.0020		mg/L	1	6/15/2016 6:06:59 PM	D34920
Calcium	80	0.26	1.0		mg/L	1	6/15/2016 6:06:59 PM	D34920
Chromium	ND	0.0018	0.0060		mg/L	1	6/15/2016 6:06:59 PM	D34920
Copper	ND	0.0040	0.0060		mg/L	1	6/15/2016 6:06:59 PM	D34920
Iron	1.5	0.045	0.10	*	mg/L	5	6/15/2016 6:08:40 PM	D34920
Magnesium	21	0.013	1.0		mg/L	1	6/15/2016 6:06:59 PM	D34920
Manganese	1.9	0.0016	0.010	*	mg/L	5	6/15/2016 6:08:40 PM	D34920
Potassium	0.64	0.18	1.0	J	mg/L	1	6/15/2016 6:06:59 PM	D34920
Silver	ND	0.0028	0.0050		mg/L	1	6/15/2016 6:06:59 PM	D34920
Sodium	280	0.48	5.0		mg/L	5	6/15/2016 6:08:40 PM	D34920
Zinc	ND	0.0028	0.010		mg/L	1	6/15/2016 6:06:59 PM	D34920
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	1.9	0.0053	0.010		mg/L	5	6/28/2016 1:24:18 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:22:35 PM	25969
Chromium	ND	0.0022	0.0060		mg/L	1	6/28/2016 1:22:35 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 1:22:35 PM	25969
Iron	2.5	0.036	0.10	*	mg/L	5	6/28/2016 1:24:18 PM	25969
Manganese	1.9	0.0076	0.010	*	mg/L	5	6/28/2016 1:24:18 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:22:35 PM	25969
Zinc	ND	0.0039	0.010		mg/L	1	6/28/2016 1:22:35 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0026	0.00014	0.0010		mg/L	1	7/6/2016 8:06:00 PM	B35457

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606613-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	ND	0.00017	0.00050		mg/L	1	7/6/2016 8:06:00 PM	B35457
Selenium	0.0054	0.00021	0.0010		mg/L	1	7/6/2016 8:06:00 PM	B35457
Uranium	0.0011	0.000051	0.00050		mg/L	1	7/6/2016 8:06:00 PM	B35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0027	0.00029	0.0010		mg/L	1	6/28/2016 7:21:21 PM	25969
Lead	0.0013	0.000047	0.00050		mg/L	1	6/28/2016 7:21:21 PM	25969
Selenium	0.0057	0.0012	0.010	J	mg/L	10	6/29/2016 10:51:46 AM	25969
Uranium	0.0012	0.0000049	0.00050		mg/L	1	6/28/2016 7:21:21 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:18:10 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	5.5	2.6	10	J	µg/L	1	6/21/2016 10:19:51 PM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Aniline	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 10:19:51 PM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Bis(2-ethylhexyl)phthalate	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Di-n-octyl phthalate	4.9	2.0	10	J	µg/L	1	6/21/2016 10:19:51 PM	25832

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606613-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 10:19:51 PM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 10:19:51 PM	25832
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 10:19:51 PM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 10:19:51 PM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Fluorene	4.1	2.7	10	J	µg/L	1	6/21/2016 10:19:51 PM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
1-Methylnaphthalene	54	2.9	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2-Methylnaphthalene	14	2.9	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 10:19:51 PM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 10:19:51 PM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Naphthalene	13	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 10:19:51 PM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 10:19:51 PM	25832
Phenanthrene	3.7	2.6	10	J	µg/L	1	6/21/2016 10:19:51 PM	25832
Phenol	ND	2.0	10		µg/L	1	6/21/2016 10:19:51 PM	25832

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606613-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 10:19:51 PM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 10:19:51 PM	25832
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 10:19:51 PM	25832
Surr: 2-Fluorophenol	40.2	0	15-123		%Rec	1	6/21/2016 10:19:51 PM	25832
Surr: Phenol-d5	36.0	0	4.13-124		%Rec	1	6/21/2016 10:19:51 PM	25832
Surr: 2,4,6-Tribromophenol	68.8	0	18.4-134		%Rec	1	6/21/2016 10:19:51 PM	25832
Surr: Nitrobenzene-d5	65.9	0	28.8-134		%Rec	1	6/21/2016 10:19:51 PM	25832
Surr: 2-Fluorobiphenyl	62.2	0	35.9-125		%Rec	1	6/21/2016 10:19:51 PM	25832
Surr: 4-Terphenyl-d14	43.0	0	15-146		%Rec	1	6/21/2016 10:19:51 PM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	16	0.096	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Toluene	0.48	0.12	1.0	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
Ethylbenzene	21	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Methyl tert-butyl ether (MTBE)	92	0.21	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2,4-Trimethylbenzene	4.0	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,3,5-Trimethylbenzene	0.40	0.12	1.0	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Naphthalene	25	0.093	2.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1-Methylnaphthalene	82	0.20	4.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
2-Methylnaphthalene	25	0.16	4.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Acetone	9.8	4.9	10	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
2-Butanone	4.4	0.74	10	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 3:25:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
cis-1,2-DCE	3.6	0.12	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606613-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1-Dichloroethane	0.82	0.11	1.0	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1-Dichloroethene	0.69	0.11	1.0	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 3:25:00 PM	R35079
Isopropylbenzene	3.6	0.10	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
4-Isopropyltoluene	1.1	0.14	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 3:25:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
n-Butylbenzene	2.2	0.16	3.0	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
n-Propylbenzene	5.3	0.13	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
sec-Butylbenzene	2.3	0.12	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
tert-Butylbenzene	0.31	0.12	1.0	J	µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 3:25:00 PM	R35079
Xylenes, Total	2.5	0.37	1.5		µg/L	1	6/22/2016 3:25:00 PM	R35079
Surr: 1,2-Dichloroethane-d4	90.8	0	70-130		%Rec	1	6/22/2016 3:25:00 PM	R35079

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1606613**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-18

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606613-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	1	6/22/2016 3:25:00 PM	R35079
Surr: Dibromofluoromethane	94.2	0	70-130		%Rec	1	6/22/2016 3:25:00 PM	R35079
Surr: Toluene-d8	97.4	0	70-130		%Rec	1	6/22/2016 3:25:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2nd Qtr GW Sampling

Collection Date:

Lab ID: 1606613-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 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	6/15/2016 2:09:14 AM	C34893
Surr: BFB	109	0	66.4-120		%Rec	1	6/15/2016 2:09:14 AM	C34893
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Toluene	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Naphthalene	ND	0.093	2.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Acetone	ND	4.9	10		µg/L	1	6/22/2016 4:13:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
2-Butanone	ND	0.74	10		µg/L	1	6/22/2016 4:13:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 4:13:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2nd Qtr GW Sampling

Collection Date:

Lab ID: 1606613-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 4:13:00 PM	R35079
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 4:13:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 4:13:00 PM	R35079
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/22/2016 4:13:00 PM	R35079
Surr: 1,2-Dichloroethane-d4	89.8	0	70-130		%Rec	1	6/22/2016 4:13:00 PM	R35079
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	6/22/2016 4:13:00 PM	R35079
Surr: Dibromofluoromethane	94.1	0	70-130		%Rec	1	6/22/2016 4:13:00 PM	R35079
Surr: Toluene-d8	94.0	0	70-130		%Rec	1	6/22/2016 4:13:00 PM	R35079

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: MKTF-19

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 12:45:00 PM

Lab ID: 1606613-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

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	6/13/2016 12:32:50 PM	25801
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 12:32:50 PM	25801
Surr: DNOP	117	0	70-141		%Rec	1	6/13/2016 12:32:50 PM	25801
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	21	0.51	1.0		mg/L	20	6/15/2016 2:32:38 AM	C34893
Surr: BFB	122	0	66.4-120	S	%Rec	20	6/15/2016 2:32:38 AM	C34893
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	0.17	0.023	0.10		mg/L	1	6/14/2016 4:19:09 PM	R34930
Chloride	150	0.55	10		mg/L	20	6/14/2016 4:31:34 PM	R34930
Bromide	0.30	0.032	0.10		mg/L	1	6/14/2016 4:19:09 PM	R34930
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 4:19:09 PM	R34930
Sulfate	0.28	0.064	0.50	J	mg/L	1	6/14/2016 4:19:09 PM	R34930
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/15/2016 2:14:50 AM	A34930
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	1.6	0.0066	0.010		mg/L	5	6/15/2016 6:12:16 PM	D34920
Cadmium	ND	0.00075	0.0020		mg/L	1	6/15/2016 6:10:35 PM	D34920
Calcium	160	1.3	5.0		mg/L	5	6/15/2016 6:12:16 PM	D34920
Chromium	ND	0.0018	0.0060		mg/L	1	6/15/2016 6:10:35 PM	D34920
Copper	ND	0.0040	0.0060		mg/L	1	6/15/2016 6:10:35 PM	D34920
Iron	9.7	0.091	0.20	*	mg/L	10	6/17/2016 2:54:15 PM	A34992
Magnesium	32	0.013	1.0		mg/L	1	6/15/2016 6:10:35 PM	D34920
Manganese	2.7	0.0016	0.010	*	mg/L	5	6/15/2016 6:12:16 PM	D34920
Potassium	0.95	0.18	1.0	J	mg/L	1	6/15/2016 6:10:35 PM	D34920
Silver	ND	0.0028	0.0050		mg/L	1	6/15/2016 6:10:35 PM	D34920
Sodium	300	0.48	5.0		mg/L	5	6/15/2016 6:12:16 PM	D34920
Zinc	0.0062	0.0028	0.010	J	mg/L	1	6/15/2016 6:10:35 PM	D34920
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	2.6	0.0053	0.010	*	mg/L	5	6/28/2016 1:29:53 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:28:06 PM	25969
Chromium	0.0082	0.0022	0.0060		mg/L	1	6/28/2016 1:28:06 PM	25969
Copper	0.012	0.0051	0.0060		mg/L	1	6/28/2016 1:28:06 PM	25969
Iron	19	0.36	1.0	*	mg/L	50	6/28/2016 1:31:39 PM	25969
Manganese	3.3	0.0076	0.010	*	mg/L	5	6/28/2016 1:29:53 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:28:06 PM	25969
Zinc	0.077	0.0039	0.010		mg/L	1	6/28/2016 1:28:06 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.015	0.00069	0.0050	*	mg/L	5	7/6/2016 8:18:16 PM	B35457

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 12:45:00 PM

Lab ID: 1606613-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.0022	0.00084	0.0025	J	mg/L	5	7/6/2016 8:18:16 PM	B35457
Selenium	0.013	0.0042	0.020	J	mg/L	20	7/6/2016 8:21:20 PM	B35457
Uranium	0.00045	0.00026	0.0025	J	mg/L	5	7/6/2016 8:18:16 PM	B35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.016	0.0015	0.0050	*	mg/L	5	6/29/2016 10:54:47 AM	25969
Lead	0.038	0.00024	0.0025	*	mg/L	5	6/29/2016 10:54:47 AM	25969
Selenium	0.011	0.0025	0.020	J	mg/L	20	6/29/2016 10:57:48 AM	25969
Uranium	0.0079	0.0000049	0.00050		mg/L	1	6/28/2016 7:24:21 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:20:14 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	5.8	2.6	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Aniline	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 10:48:28 PM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Bis(2-ethylhexyl)phthalate	3.5	2.6	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Carbazole	7.2	2.3	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 10:48:28 PM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Di-n-octyl phthalate	5.1	2.0	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 12:45:00 PM

Lab ID: 1606613-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 10:48:28 PM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 10:48:28 PM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 10:48:28 PM	25832
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 10:48:28 PM	25832
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 10:48:28 PM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 10:48:28 PM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 10:48:28 PM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Fluorene	4.4	2.7	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
1-Methylnaphthalene	120	2.9	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2-Methylnaphthalene	160	2.9	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 10:48:28 PM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 10:48:28 PM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 10:48:28 PM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Naphthalene	240	5.2	20		µg/L	2	6/29/2016 10:32:14 AM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 10:48:28 PM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 10:48:28 PM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 10:48:28 PM	25832
Phenanthrene	4.6	2.6	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832
Phenol	7.0	2.0	10	J	µg/L	1	6/21/2016 10:48:28 PM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 12:45:00 PM

Lab ID: 1606613-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 10:48:28 PM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 10:48:28 PM	25832
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 10:48:28 PM	25832
Surr: 2-Fluorophenol	31.1	0	15-123		%Rec	1	6/21/2016 10:48:28 PM	25832
Surr: Phenol-d5	38.2	0	4.13-124		%Rec	1	6/21/2016 10:48:28 PM	25832
Surr: 2,4,6-Tribromophenol	62.5	0	18.4-134		%Rec	1	6/21/2016 10:48:28 PM	25832
Surr: Nitrobenzene-d5	67.2	0	28.8-134		%Rec	1	6/21/2016 10:48:28 PM	25832
Surr: 2-Fluorobiphenyl	63.3	0	35.9-125		%Rec	1	6/21/2016 10:48:28 PM	25832
Surr: 4-Terphenyl-d14	32.2	0	15-146		%Rec	1	6/21/2016 10:48:28 PM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	1500	9.6	100		µg/L	100	6/22/2016 4:38:00 PM	R35079
Toluene	6.4	1.2	10	J	µg/L	10	6/22/2016 5:02:00 PM	R35079
Ethylbenzene	690	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Methyl tert-butyl ether (MTBE)	7900	21	100		µg/L	100	6/22/2016 4:38:00 PM	R35079
1,2,4-Trimethylbenzene	580	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,3,5-Trimethylbenzene	79	1.2	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	1.2	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Naphthalene	410	0.93	20		µg/L	10	6/22/2016 5:02:00 PM	R35079
1-Methylnaphthalene	150	2.0	40		µg/L	10	6/22/2016 5:02:00 PM	R35079
2-Methylnaphthalene	210	1.6	40		µg/L	10	6/22/2016 5:02:00 PM	R35079
Acetone	ND	49	100		µg/L	10	6/22/2016 5:02:00 PM	R35079
Bromobenzene	ND	0.98	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Bromodichloromethane	ND	1.4	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Bromoform	ND	1.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Bromomethane	ND	7.8	30		µg/L	10	6/22/2016 5:02:00 PM	R35079
2-Butanone	ND	7.4	100		µg/L	10	6/22/2016 5:02:00 PM	R35079
Carbon disulfide	ND	6.0	100		µg/L	10	6/22/2016 5:02:00 PM	R35079
Carbon Tetrachloride	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Chlorobenzene	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Chloroethane	ND	1.9	20		µg/L	10	6/22/2016 5:02:00 PM	R35079
Chloroform	ND	0.89	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Chloromethane	ND	2.1	30		µg/L	10	6/22/2016 5:02:00 PM	R35079
2-Chlorotoluene	ND	4.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
4-Chlorotoluene	ND	1.3	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
cis-1,2-DCE	ND	1.2	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
cis-1,3-Dichloropropene	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 12:45:00 PM

Lab ID: 1606613-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	2.3	20		µg/L	10	6/22/2016 5:02:00 PM	R35079
Dibromochloromethane	ND	0.87	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Dibromomethane	ND	1.2	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2-Dichlorobenzene	ND	4.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,3-Dichlorobenzene	ND	1.4	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,4-Dichlorobenzene	ND	1.4	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Dichlorodifluoromethane	ND	3.6	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1-Dichloroethane	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1-Dichloroethene	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2-Dichloropropane	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,3-Dichloropropane	ND	1.6	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
2,2-Dichloropropane	ND	1.7	20		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1-Dichloropropene	ND	1.3	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Hexachlorobutadiene	ND	2.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
2-Hexanone	ND	8.4	100		µg/L	10	6/22/2016 5:02:00 PM	R35079
Isopropylbenzene	34	1.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
4-Isopropyltoluene	5.4	1.4	10	J	µg/L	10	6/22/2016 5:02:00 PM	R35079
4-Methyl-2-pentanone	ND	4.3	100		µg/L	10	6/22/2016 5:02:00 PM	R35079
Methylene Chloride	ND	1.9	30		µg/L	10	6/22/2016 5:02:00 PM	R35079
n-Butylbenzene	17	1.6	30	J	µg/L	10	6/22/2016 5:02:00 PM	R35079
n-Propylbenzene	90	1.3	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
sec-Butylbenzene	6.5	1.2	10	J	µg/L	10	6/22/2016 5:02:00 PM	R35079
Styrene	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
tert-Butylbenzene	ND	1.2	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	1.3	20		µg/L	10	6/22/2016 5:02:00 PM	R35079
Tetrachloroethene (PCE)	ND	1.5	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
trans-1,2-DCE	ND	4.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
trans-1,3-Dichloropropene	ND	1.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2,3-Trichlorobenzene	ND	1.1	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2,4-Trichlorobenzene	ND	1.3	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1,1-Trichloroethane	ND	0.91	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,1,2-Trichloroethane	ND	1.3	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Trichloroethene (TCE)	ND	1.8	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Trichlorofluoromethane	ND	2.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
1,2,3-Trichloropropane	ND	2.0	20		µg/L	10	6/22/2016 5:02:00 PM	R35079
Vinyl chloride	ND	2.0	10		µg/L	10	6/22/2016 5:02:00 PM	R35079
Xylenes, Total	660	3.7	15		µg/L	10	6/22/2016 5:02:00 PM	R35079
Surr: 1,2-Dichloroethane-d4	90.9	0	70-130		%Rec	10	6/22/2016 5:02:00 PM	R35079

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 **1606613**

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-19

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 12:45:00 PM

Lab ID: 1606613-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	99.1	0	70-130		%Rec	10	6/22/2016 5:02:00 PM	R35079
Surr: Dibromofluoromethane	95.8	0	70-130		%Rec	10	6/22/2016 5:02:00 PM	R35079
Surr: Toluene-d8	94.9	0	70-130		%Rec	10	6/22/2016 5:02:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2nd Qtr GW Sampling

Collection Date:

Lab ID: 1606613-006

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 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	6/15/2016 2:56:02 AM	C34893
Surr: BFB	109	0	66.4-120		%Rec	1	6/15/2016 2:56:02 AM	C34893
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Toluene	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Naphthalene	0.27	0.093	2.0	J	µg/L	1	6/22/2016 5:50:00 PM	R35079
1-Methylnaphthalene	0.38	0.20	4.0	J	µg/L	1	6/22/2016 5:50:00 PM	R35079
2-Methylnaphthalene	0.45	0.16	4.0	J	µg/L	1	6/22/2016 5:50:00 PM	R35079
Acetone	ND	4.9	10		µg/L	1	6/22/2016 5:50:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
2-Butanone	ND	0.74	10		µg/L	1	6/22/2016 5:50:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 5:50:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2nd Qtr GW Sampling

Collection Date:

Lab ID: 1606613-006

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 5:50:00 PM	R35079
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 5:50:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 5:50:00 PM	R35079
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/22/2016 5:50:00 PM	R35079
Surr: 1,2-Dichloroethane-d4	88.5	0	70-130		%Rec	1	6/22/2016 5:50:00 PM	R35079
Surr: 4-Bromofluorobenzene	107	0	70-130		%Rec	1	6/22/2016 5:50:00 PM	R35079
Surr: Dibromofluoromethane	94.2	0	70-130		%Rec	1	6/22/2016 5:50:00 PM	R35079
Surr: Toluene-d8	97.0	0	70-130		%Rec	1	6/22/2016 5:50:00 PM	R35079

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 3:45:00 PM

Lab ID: 1606613-007

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
							Analyst: JME	
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 3:15:11 PM	25857
EPA METHOD 8015M/D: DIESEL RANGE								
							Analyst: TOM	
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/13/2016 12:54:33 PM	25801
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 12:54:33 PM	25801
Surr: DNOP	121	0	70-141		%Rec	1	6/13/2016 12:54:33 PM	25801
EPA METHOD 8015D: GASOLINE RANGE								
							Analyst: NSB	
Gasoline Range Organics (GRO)	1.4	0.025	0.050		mg/L	1	6/15/2016 3:19:31 AM	C34893
Surr: BFB	136	0	66.4-120	S	%Rec	1	6/15/2016 3:19:31 AM	C34893
EPA METHOD 300.0: ANIONS								
							Analyst: MRA	
Fluoride	0.79	0.023	0.10		mg/L	1	6/14/2016 4:43:58 PM	R34930
Chloride	51	0.55	10		mg/L	20	6/14/2016 4:56:23 PM	R34930
Bromide	0.22	0.032	0.10		mg/L	1	6/14/2016 4:43:58 PM	R34930
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 4:43:58 PM	R34930
Sulfate	210	1.3	10		mg/L	20	6/14/2016 4:56:23 PM	R34930
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/15/2016 2:27:15 AM	A34930
EPA METHOD 200.7: DISSOLVED METALS								
							Analyst: ELS	
Barium	0.37	0.0013	0.0020		mg/L	1	6/15/2016 6:14:03 PM	D34920
Cadmium	ND	0.00075	0.0020		mg/L	1	6/15/2016 6:14:03 PM	D34920
Calcium	120	1.3	5.0		mg/L	5	6/15/2016 6:15:43 PM	D34920
Chromium	ND	0.0018	0.0060		mg/L	1	6/15/2016 6:14:03 PM	D34920
Copper	ND	0.0040	0.0060		mg/L	1	6/15/2016 6:14:03 PM	D34920
Iron	2.5	0.045	0.10	*	mg/L	5	6/15/2016 6:15:43 PM	D34920
Magnesium	34	0.013	1.0		mg/L	1	6/15/2016 6:14:03 PM	D34920
Manganese	2.7	0.0016	0.010	*	mg/L	5	6/15/2016 6:15:43 PM	D34920
Potassium	0.47	0.18	1.0	J	mg/L	1	6/15/2016 6:14:03 PM	D34920
Silver	ND	0.0028	0.0050		mg/L	1	6/15/2016 6:14:03 PM	D34920
Sodium	150	0.48	5.0		mg/L	5	6/15/2016 6:15:43 PM	D34920
Zinc	ND	0.0028	0.010		mg/L	1	6/15/2016 6:14:03 PM	D34920
EPA METHOD 200.7: TOTAL METALS								
							Analyst: ELS	
Barium	0.89	0.0011	0.0020		mg/L	1	6/28/2016 1:39:02 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:39:02 PM	25969
Chromium	0.0023	0.0022	0.0060	J	mg/L	1	6/28/2016 1:39:02 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 1:39:02 PM	25969
Iron	4.5	0.036	0.10	*	mg/L	5	6/28/2016 1:40:42 PM	25969
Manganese	3.3	0.0076	0.010	*	mg/L	5	6/28/2016 1:40:42 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:39:02 PM	25969
Zinc	0.0074	0.0039	0.010	J	mg/L	1	6/28/2016 1:39:02 PM	25969

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 3:45:00 PM

Lab ID: 1606613-007

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.00061	0.00014	0.0010	J	mg/L	1	7/6/2016 8:24:23 PM	B35457
Lead	ND	0.00017	0.00050		mg/L	1	7/6/2016 8:24:23 PM	B35457
Selenium	0.0023	0.0011	0.0050	J	mg/L	5	7/6/2016 8:27:26 PM	B35457
Uranium	0.0011	0.000051	0.00050		mg/L	1	7/6/2016 8:24:23 PM	B35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.00093	0.00029	0.0010	J	mg/L	1	6/28/2016 7:27:22 PM	25969
Lead	0.0049	0.000047	0.00050		mg/L	1	6/28/2016 7:27:22 PM	25969
Selenium	0.0013	0.00062	0.0050	J	mg/L	5	6/29/2016 11:00:48 AM	25969
Uranium	0.0020	0.0000049	0.00050		mg/L	1	6/28/2016 7:27:22 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:22:18 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Aniline	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 11:16:49 PM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Bis(2-ethylhexyl)phthalate	3.2	2.6	10	J	µg/L	1	6/21/2016 11:16:49 PM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 11:16:49 PM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 3:45:00 PM

Lab ID: 1606613-007

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.9	2.0	10	J	µg/L	1	6/21/2016 11:16:49 PM	25832
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 11:16:49 PM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 11:16:49 PM	25832
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 11:16:49 PM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 11:16:49 PM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 11:16:49 PM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 11:16:49 PM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 11:16:49 PM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 11:16:49 PM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 11:16:49 PM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 11:16:49 PM	25832
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832

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Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 11:16:49 PM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 11:16:49 PM	25832
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 11:16:49 PM	25832
Surr: 2-Fluorophenol	29.9	0	15-123		%Rec	1	6/21/2016 11:16:49 PM	25832
Surr: Phenol-d5	27.4	0	4.13-124		%Rec	1	6/21/2016 11:16:49 PM	25832
Surr: 2,4,6-Tribromophenol	65.9	0	18.4-134		%Rec	1	6/21/2016 11:16:49 PM	25832
Surr: Nitrobenzene-d5	64.7	0	28.8-134		%Rec	1	6/21/2016 11:16:49 PM	25832
Surr: 2-Fluorobiphenyl	59.0	0	35.9-125		%Rec	1	6/21/2016 11:16:49 PM	25832
Surr: 4-Terphenyl-d14	36.8	0	15-146		%Rec	1	6/21/2016 11:16:49 PM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	67	0.096	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Toluene	0.27	0.12	1.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
Ethylbenzene	12	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Methyl tert-butyl ether (MTBE)	19	0.21	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2,4-Trimethylbenzene	1.2	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,3,5-Trimethylbenzene	0.20	0.12	1.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Naphthalene	ND	0.093	2.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Acetone	6.8	4.9	10	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
2-Butanone	2.0	0.74	10	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 6:38:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Chlorobenzene	0.69	0.11	1.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079

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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.

Analytical Report

Lab Order 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 3:45:00 PM

Lab ID: 1606613-007

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,4-Dichlorobenzene	5.6	0.14	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1-Dichloroethane	0.45	0.11	1.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 6:38:00 PM	R35079
Isopropylbenzene	1.8	0.10	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
4-Isopropyltoluene	0.41	0.14	1.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 6:38:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
n-Butylbenzene	0.53	0.16	3.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
n-Propylbenzene	4.5	0.13	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
sec-Butylbenzene	1.9	0.12	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
tert-Butylbenzene	0.19	0.12	1.0	J	µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 6:38:00 PM	R35079
Xylenes, Total	5.5	0.37	1.5		µg/L	1	6/22/2016 6:38:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-35

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016 3:45:00 PM

Lab ID: 1606613-007

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	90.7	0	70-130		%Rec	1	6/22/2016 6:38:00 PM	R35079
Surr: 4-Bromofluorobenzene	98.7	0	70-130		%Rec	1	6/22/2016 6:38:00 PM	R35079
Surr: Dibromofluoromethane	97.0	0	70-130		%Rec	1	6/22/2016 6:38:00 PM	R35079
Surr: Toluene-d8	98.9	0	70-130		%Rec	1	6/22/2016 6:38:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2nd Qtr GW Sampling

Collection Date:

Lab ID: 1606613-008

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 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	6/15/2016 3:43:00 AM	C34893
Surr: BFB	109	0	66.4-120		%Rec	1	6/15/2016 3:43:00 AM	C34893
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Toluene	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Naphthalene	ND	0.093	2.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Acetone	ND	4.9	10		µg/L	1	6/22/2016 7:25:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
2-Butanone	ND	0.74	10		µg/L	1	6/22/2016 7:25:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 7:25:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2nd Qtr GW Sampling

Collection Date:

Lab ID: 1606613-008

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 7:25:00 PM	R35079
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 7:25:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 7:25:00 PM	R35079
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/22/2016 7:25:00 PM	R35079
Surr: 1,2-Dichloroethane-d4	82.1	0	70-130		%Rec	1	6/22/2016 7:25:00 PM	R35079
Surr: 4-Bromofluorobenzene	107	0	70-130		%Rec	1	6/22/2016 7:25:00 PM	R35079
Surr: Dibromofluoromethane	94.5	0	70-130		%Rec	1	6/22/2016 7:25:00 PM	R35079
Surr: Toluene-d8	102	0	70-130		%Rec	1	6/22/2016 7:25:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-DUP03

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016

Lab ID: 1606613-009

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 3:30:32 PM	25857
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/13/2016 1:16:32 PM	25801
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 1:16:32 PM	25801
Surr: DNOP	120	0	70-141		%Rec	1	6/13/2016 1:16:32 PM	25801
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	1.5	0.025	0.050		mg/L	1	6/15/2016 4:06:24 AM	C34893
Surr: BFB	135	0	66.4-120	S	%Rec	1	6/15/2016 4:06:24 AM	C34893
EPA METHOD 300.0: ANIONS								
Analyst: MRA								
Fluoride	0.82	0.023	0.10		mg/L	1	6/14/2016 5:08:48 PM	R34930
Chloride	52	0.55	10		mg/L	20	6/14/2016 5:21:13 PM	R34930
Bromide	0.23	0.032	0.10		mg/L	1	6/14/2016 5:08:48 PM	R34930
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 5:08:48 PM	R34930
Sulfate	200	1.3	10		mg/L	20	6/14/2016 5:21:13 PM	R34930
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/16/2016 4:12:00 AM	A34957
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.37	0.0013	0.0020		mg/L	1	6/15/2016 6:17:41 PM	D34920
Cadmium	ND	0.00075	0.0020		mg/L	1	6/15/2016 6:17:41 PM	D34920
Calcium	120	1.3	5.0		mg/L	5	6/15/2016 6:19:20 PM	D34920
Chromium	ND	0.0018	0.0060		mg/L	1	6/15/2016 6:17:41 PM	D34920
Copper	ND	0.0040	0.0060		mg/L	1	6/15/2016 6:17:41 PM	D34920
Iron	2.4	0.045	0.10	*	mg/L	5	6/15/2016 6:19:20 PM	D34920
Magnesium	34	0.013	1.0		mg/L	1	6/15/2016 6:17:41 PM	D34920
Manganese	2.7	0.0016	0.010	*	mg/L	5	6/15/2016 6:19:20 PM	D34920
Potassium	0.43	0.18	1.0	J	mg/L	1	6/15/2016 6:17:41 PM	D34920
Silver	ND	0.0028	0.0050		mg/L	1	6/15/2016 6:17:41 PM	D34920
Sodium	150	0.48	5.0		mg/L	5	6/15/2016 6:19:20 PM	D34920
Zinc	ND	0.0028	0.010		mg/L	1	6/15/2016 6:17:41 PM	D34920
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	1.1	0.0053	0.010		mg/L	5	6/28/2016 1:46:17 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:44:38 PM	25969
Chromium	ND	0.0022	0.0060		mg/L	1	6/28/2016 1:44:38 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 1:44:38 PM	25969
Iron	4.8	0.036	0.10	*	mg/L	5	6/28/2016 1:46:17 PM	25969
Manganese	3.4	0.0076	0.010	*	mg/L	5	6/28/2016 1:46:17 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:44:38 PM	25969
Zinc	0.0084	0.0039	0.010	J	mg/L	1	6/28/2016 1:44:38 PM	25969

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-DUP03

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016

Lab ID: 1606613-009

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.00060	0.00014	0.0010	J	mg/L	1	7/6/2016 8:30:29 PM	B35457
Lead	ND	0.00017	0.00050		mg/L	1	7/6/2016 8:30:29 PM	B35457
Selenium	0.0025	0.0011	0.0050	J	mg/L	5	7/6/2016 8:33:33 PM	B35457
Uranium	0.0011	0.000051	0.00050		mg/L	1	7/6/2016 8:30:29 PM	B35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0010	0.00029	0.0010	J	mg/L	1	6/28/2016 7:30:23 PM	25969
Lead	0.0052	0.000047	0.00050		mg/L	1	6/28/2016 7:30:23 PM	25969
Selenium	0.0016	0.00062	0.0050	J	mg/L	5	6/29/2016 11:03:49 AM	25969
Uranium	0.0019	0.0000049	0.00050		mg/L	1	6/28/2016 7:30:23 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:24:23 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Aniline	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Anthracene	ND	2.5	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/22/2016 11:04:04 AM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Bis(2-ethylhexyl)phthalate	3.2	2.6	10	J	µg/L	1	6/22/2016 11:04:04 AM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Carbazole	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/22/2016 11:04:04 AM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Chrysene	ND	2.8	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-DUP03

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016

Lab ID: 1606613-009

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.1	2.0	10	J	µg/L	1	6/22/2016 11:04:04 AM	25832
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/22/2016 11:04:04 AM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
1,4-Dichlorobenzene	3.8	2.4	10	J	µg/L	1	6/22/2016 11:04:04 AM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Dimethyl phthalate	3.8	2.4	10	J	µg/L	1	6/22/2016 11:04:04 AM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/22/2016 11:04:04 AM	25832
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/22/2016 11:04:04 AM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/22/2016 11:04:04 AM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/22/2016 11:04:04 AM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Fluorene	ND	2.7	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Isophorone	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/22/2016 11:04:04 AM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/22/2016 11:04:04 AM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Naphthalene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/22/2016 11:04:04 AM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/22/2016 11:04:04 AM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/22/2016 11:04:04 AM	25832
Phenanthrene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-DUP03

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016

Lab ID: 1606613-009

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Pyrene	ND	3.1	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Pyridine	ND	2.2	10		µg/L	1	6/22/2016 11:04:04 AM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/22/2016 11:04:04 AM	25832
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/22/2016 11:04:04 AM	25832
Surr: 2-Fluorophenol	18.6	0	15-123		%Rec	1	6/22/2016 11:04:04 AM	25832
Surr: Phenol-d5	26.8	0	4.13-124		%Rec	1	6/22/2016 11:04:04 AM	25832
Surr: 2,4,6-Tribromophenol	19.9	0	18.4-134		%Rec	1	6/22/2016 11:04:04 AM	25832
Surr: Nitrobenzene-d5	86.8	0	28.8-134		%Rec	1	6/22/2016 11:04:04 AM	25832
Surr: 2-Fluorobiphenyl	77.4	0	35.9-125		%Rec	1	6/22/2016 11:04:04 AM	25832
Surr: 4-Terphenyl-d14	57.2	0	15-146		%Rec	1	6/22/2016 11:04:04 AM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	170	0.48	5.0		µg/L	5	6/22/2016 7:49:00 PM	R35079
Toluene	0.54	0.12	1.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
Ethylbenzene	18	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Methyl tert-butyl ether (MTBE)	23	0.21	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2,4-Trimethylbenzene	2.8	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,3,5-Trimethylbenzene	0.40	0.12	1.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Naphthalene	0.89	0.093	2.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Acetone	7.6	4.9	10	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
Bromobenzene	ND	0.098	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Bromoform	ND	0.10	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Bromomethane	ND	0.78	3.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
2-Butanone	2.8	0.74	10	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
Carbon disulfide	ND	0.60	10		µg/L	1	6/22/2016 8:12:00 PM	R35079
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Chlorobenzene	0.78	0.11	1.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
Chloroethane	ND	0.19	2.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Chloroform	ND	0.089	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Chloromethane	ND	0.21	3.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-DUP03

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016

Lab ID: 1606613-009

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Dibromomethane	ND	0.12	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,4-Dichlorobenzene	6.1	0.14	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1-Dichloroethane	0.49	0.11	1.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
2-Hexanone	ND	0.84	10		µg/L	1	6/22/2016 8:12:00 PM	R35079
Isopropylbenzene	2.2	0.10	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
4-Isopropyltoluene	0.48	0.14	1.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/22/2016 8:12:00 PM	R35079
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
n-Butylbenzene	0.59	0.16	3.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
n-Propylbenzene	5.7	0.13	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
sec-Butylbenzene	2.2	0.12	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Styrene	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
tert-Butylbenzene	0.22	0.12	1.0	J	µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/22/2016 8:12:00 PM	R35079
Xylenes, Total	13	0.37	1.5		µg/L	1	6/22/2016 8:12:00 PM	R35079

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 1606613

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-DUP03

Project: 2nd Qtr GW Sampling

Collection Date: 6/10/2016

Lab ID: 1606613-009

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	87.4	0	70-130		%Rec	1	6/22/2016 8:12:00 PM	R35079
Surr: 4-Bromofluorobenzene	109	0	70-130		%Rec	1	6/22/2016 8:12:00 PM	R35079
Surr: Dibromofluoromethane	94.0	0	70-130		%Rec	1	6/22/2016 8:12:00 PM	R35079
Surr: Toluene-d8	92.4	0	70-130		%Rec	1	6/22/2016 8:12:00 PM	R35079

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
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	MB-D	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: D34920			RunNo: 34920					
Prep Date:		Analysis Date: 6/15/2016			SeqNo: 1079533		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-D		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals						
Client ID:	LCSW		Batch ID: D34920		RunNo: 34920						
Prep Date:			Analysis Date: 6/15/2016		SeqNo: 1079534		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Barium	0.50	0.0020	0.5000	0	99.2	85	115				
Cadmium	0.51	0.0020	0.5000	0	102	85	115				
Calcium	50	1.0	50.00	0	101	85	115				
Chromium	0.50	0.0060	0.5000	0	99.1	85	115				
Copper	0.50	0.0060	0.5000	0	100	85	115				
Iron	0.49	0.020	0.5000	0	97.4	85	115				
Magnesium	50	1.0	50.00	0	100	85	115				
Manganese	0.49	0.0020	0.5000	0	97.3	85	115				
Potassium	48	1.0	50.00	0	96.8	85	115				
Silver	0.10	0.0050	0.1000	0	101	85	115				
Sodium	50	1.0	50.00	0	99.3	85	115				
Zinc	0.49	0.010	0.5000	0	98.1	85	115				

Sample ID	LLCS-D		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: D34920		RunNo: 34920					
Prep Date:			Analysis Date: 6/15/2016		SeqNo: 1079535		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	116	50	150			
Cadmium	0.0021	0.0020	0.002000	0	107	50	150			
Calcium	0.54	1.0	0.5000	0	109	50	150			J
Chromium	0.0058	0.0060	0.006000	0	97.0	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	LLLCS-D		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: D34920		RunNo: 34920					
Prep Date:			Analysis Date: 6/15/2016		SeqNo: 1079535		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.0062	0.0060	0.006000	0	104	50	150			
Iron	0.021	0.020	0.02000	0	104	50	150			
Magnesium	0.54	1.0	0.5000	0	107	50	150			J
Manganese	0.0021	0.0020	0.002000	0	105	50	150			
Potassium	0.53	1.0	0.5000	0	107	50	150			J
Silver	0.0050	0.0050	0.005000	0	101	50	150			
Sodium	0.55	1.0	0.5000	0	110	50	150			J
Zinc	0.0062	0.010	0.005000	0	125	50	150			J

Sample ID	MB-A		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals				
Client ID:	PBW		Batch ID:	A34992		RunNo:	34992				
Prep Date:			Analysis Date:	6/17/2016		SeqNo:	1081597	Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Iron	ND	0.020									

Sample ID	LCS-A		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: A34992		RunNo: 34992					
Prep Date:			Analysis Date: 6/17/2016		SeqNo: 1081598		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.48	0.020	0.5000	0	95.9	85	115			

Sample ID	LLLCS-A		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: A34992		RunNo: 34992					
Prep Date:			Analysis Date: 6/17/2016		SeqNo: 1081599		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.020	0.020	0.02000	0	97.5	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	MB-25969		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 25969		RunNo: 35085					
Prep Date:	6/21/2016		Analysis Date: 6/22/2016		SeqNo: 1085152		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-25969		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 25969		RunNo: 35085					
Prep Date:	6/21/2016		Analysis Date: 6/22/2016		SeqNo: 1085153		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.9	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.2	85	115			
Chromium	0.48	0.0060	0.5000	0	95.7	85	115			
Copper	0.48	0.0060	0.5000	0	95.2	85	115			
Iron	0.47	0.020	0.5000	0	94.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.1	85	115			
Silver	0.098	0.0050	0.1000	0	98.3	85	115			
Zinc	0.47	0.010	0.5000	0	93.7	85	115			

Sample ID	LLLCS-25969		SampType: LCSLL		TestCode: EPA Method 200.7: Total Metals					
Client ID:	BatchQC		Batch ID: 25969		RunNo: 35085					
Prep Date:	6/21/2016		Analysis Date: 6/22/2016		SeqNo: 1085154		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0022	0.0020	0.002000	0	108	50	150			
Cadmium	0.0014	0.0020	0.002000	0	67.5	50	150			J
Chromium	0.0058	0.0060	0.006000	0	96.7	50	150			J
Copper	0.0071	0.0060	0.006000	0	118	50	150			
Iron	0.017	0.020	0.02000	0	86.2	50	150			J
Manganese	0.0021	0.0020	0.002000	0	105	50	150			
Silver	0.0049	0.0050	0.005000	0	98.4	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: B35457		RunNo: 35457					
Prep Date:			Analysis Date: 7/6/2016		SeqNo: 1098043		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	93.7	85	115			
Lead	0.012	0.00050	0.01250	0	93.2	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.012	0.00050	0.01250	0	93.1	85	115			

Sample ID	LLCS		SampType: LCSLL		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	BatchQC		Batch ID: B35457		RunNo: 35457					
Prep Date:			Analysis Date: 7/6/2016		SeqNo: 1098045		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00098	0.0010	0.001000	0	97.8	50	150			J
Lead	0.00047	0.00050	0.0005000	0	94.6	50	150			J
Selenium	0.0011	0.0010	0.001000	0	109	50	150			
Uranium	0.00046	0.00050	0.0005000	0	92.3	50	150			J

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: B35457			RunNo: 35457					
Prep Date:		Analysis Date: 7/6/2016			SeqNo: 1098047		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								

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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	MB-25969		SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	PBW		Batch ID:	25969		RunNo:	35099			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085405	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-25969		SampType:	LCS		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	LCSW		Batch ID:	25969		RunNo:	35099			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085406	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.9	85	115			
Lead	0.012	0.00050	0.01250	0	94.7	85	115			
Selenium	0.024	0.0010	0.02500	0	95.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID	MSLLLCS-25969		SampType:	LCSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	BatchQC		Batch ID:	25969		RunNo:	35099			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085407	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	106	50	150			
Lead	0.00048	0.00050	0.0005000	0	96.3	50	150			J
Selenium	0.00096	0.0010	0.001000	0	95.7	50	150			J
Uranium	0.00052	0.00050	0.0005000	0	104	50	150			

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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	MB-26107	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	26107	RunNo:	35280					
Prep Date:	6/27/2016	Analysis Date:	6/28/2016	SeqNo:	1091051	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	LCS-26107	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	26107	RunNo:	35280					
Prep Date:	6/27/2016	Analysis Date:	6/28/2016	SeqNo:	1091052	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R34930		RunNo: 34930							
Prep Date:	Analysis Date: 6/14/2016		SeqNo: 1078891		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	0.14	0.50								J

Sample ID LCS	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R34930		RunNo: 34930							
Prep Date:	Analysis Date: 6/14/2016		SeqNo: 1078892		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	105	90	110			
Chloride	5.0	0.50	5.000	0	99.4	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	101	90	110			
Sulfate	10	0.50	10.00	0	99.9	90	110			

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: A34930		RunNo: 34930							
Prep Date:	Analysis Date: 6/15/2016		SeqNo: 1078946		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: A34930		RunNo: 34930							
Prep Date:	Analysis Date: 6/15/2016		SeqNo: 1078947		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.6	0.20	3.500	0	104	90	110			

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: A34957		RunNo: 34957							
Prep Date:	Analysis Date: 6/16/2016		SeqNo: 1080142		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	LCS		SampType: Ics		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: A34957		RunNo: 34957					
Prep Date:			Analysis Date: 6/16/2016		SeqNo: 1080143		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	100	90	110			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: R35229			RunNo: 35229					
Prep Date:		Analysis Date: 6/27/2016			SeqNo: 1089261		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: R35229		RunNo: 35229					
Prep Date:			Analysis Date: 6/27/2016		SeqNo: 1089262		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.1	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	MB-25857		SampType:	MBLK		TestCode:	EPA Method 8011/504.1: EDB				
Client ID:	PBW		Batch ID:	25857		RunNo:	34956				
Prep Date:	6/15/2016		Analysis Date:	6/15/2016		SeqNo:	1080029		Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,2-Dibromoethane	ND	0.010									

Sample ID	LCS-25857			SampType:	LCS		TestCode:	EPA Method 8011/504.1: EDB			
Client ID:	LCSW			Batch ID:	25857		RunNo:	34956			
Prep Date:	6/15/2016			Analysis Date:	6/15/2016		SeqNo:	1080030		Units:	µg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,2-Dibromoethane	0.090	0.010	0.1000	0	90.5	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	LCS-25801		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 25801		RunNo: 34862					
Prep Date:	6/13/2016		Analysis Date: 6/13/2016		SeqNo: 1076749		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.9	1.0	5.000	0	98.6	71.3	139			
Surr: DNOP	0.50		0.5000		99.6	70	141			

Sample ID	MB-25801	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW	Batch ID: 25801			RunNo: 34862					
Prep Date:	6/13/2016	Analysis Date: 6/13/2016			SeqNo: 1076750		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		108	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	5ML RB-II		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW		Batch ID: C34893		RunNo: 34893					
Prep Date:			Analysis Date: 6/14/2016		SeqNo: 1078066		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	21		20.00		107	66.4	120			

Sample ID	2.5UG GRO LCS-II		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: C34893		RunNo: 34893					
Prep Date:			Analysis Date: 6/14/2016		SeqNo: 1078067		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.47	0.050	0.5000	0	93.6	80	120			
Surr: BFB	24		20.00		118	66.4	120			

Sample ID	5ML RB		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBW		Batch ID: A34934		RunNo: 34934					
Prep Date:			Analysis Date: 6/15/2016		SeqNo: 1079447		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	22		20.00		111	66.4	120			

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID: A34934			RunNo: 34934					
Prep Date:		Analysis Date: 6/15/2016			SeqNo: 1079448		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.48	0.050	0.5000	0	95.8	80	120			
Surr: BFB	24		20.00		121	66.4	120			S

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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R35079			RunNo: 35079					
Prep Date:		Analysis Date: 6/22/2016			SeqNo: 1085648		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	20	1.0	20.00	0	97.8	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	93.7	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.2	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R35079			RunNo: 35079					
Prep Date:		Analysis Date: 6/22/2016			SeqNo: 1085649		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								

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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	rb	SampType: MBLK				TestCode: EPA Method 8260B: VOLATILES				
Client ID:	PBW	Batch ID: R35079				RunNo: 35079				
Prep Date:		Analysis Date: 6/22/2016				SeqNo: 1085649	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	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								

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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch ID: R35079			RunNo: 35079						
Prep Date:	Analysis Date: 6/22/2016			SeqNo: 1085649		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.2	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID 1606613-002ams	SampType: MS			TestCode: EPA Method 8260B: VOLATILES						
Client ID: MKTF-34	Batch ID: R35079			RunNo: 35079						
Prep Date:	Analysis Date: 6/22/2016			SeqNo: 1085653		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0.4520	90.9	70	130			
Toluene	19	1.0	20.00	0	95.0	70	130			
Chlorobenzene	19	1.0	20.00	0	96.0	70	130			
1,1-Dichloroethene	20	1.0	20.00	0.7840	97.4	70	130			
Trichloroethene (TCE)	20	1.0	20.00	2.018	90.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.6	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.8	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Sample ID 1606613-002amsd	SampType: MSD			TestCode: EPA Method 8260B: VOLATILES						
Client ID: MKTF-34	Batch ID: R35079			RunNo: 35079						
Prep Date:	Analysis Date: 6/22/2016			SeqNo: 1085654		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0.4520	91.9	70	130	1.09	20	
Toluene	19	1.0	20.00	0	94.4	70	130	0.591	20	
Chlorobenzene	19	1.0	20.00	0	95.3	70	130	0.784	20	
1,1-Dichloroethene	18	1.0	20.00	0.7840	87.0	70	130	10.9	20	
Trichloroethene (TCE)	20	1.0	20.00	2.018	90.1	70	130	0.587	20	
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130	0	0	
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.3	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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	mb-25832		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 25832		RunNo: 35052					
Prep Date:	6/14/2016		Analysis Date: 6/21/2016		SeqNo: 1083880		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	6.4	20								J
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	3.5	10								J
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	5.0	10								J
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	4.2	10								J
Diethyl phthalate	ND	10								
Dimethyl phthalate	4.4	10								J
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	4.6	20								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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	mb-25832	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	25832	RunNo:	35052					
Prep Date:	6/14/2016	Analysis Date:	6/21/2016	SeqNo:	1083880	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	100		200.0		52.4	15	123			
Surr: Phenol-d5	95		200.0		47.6	4.13	124			
Surr: 2,4,6-Tribromophenol	160		200.0		81.2	18.4	134			
Surr: Nitrobenzene-d5	61		100.0		60.7	28.8	134			
Surr: 2-Fluorobiphenyl	56		100.0		56.3	35.9	125			
Surr: 4-Terphenyl-d14	110		100.0		108	15	146			

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#: 1606613

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2nd Qtr GW Sampling

Sample ID	Ics-25832	SampType: LCS			TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW	Batch ID: 25832			RunNo: 35052					
Prep Date:	6/14/2016	Analysis Date: 6/21/2016			SeqNo: 1083881		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	67.5	35	113			
4-Chloro-3-methylphenol	150	10	200.0	0	76.6	40.7	114			
2-Chlorophenol	140	10	200.0	0	71.1	37.6	113			
1,4-Dichlorobenzene	53	10	100.0	0	53.3	37.7	106			
2,4-Dinitrotoluene	69	10	100.0	0	69.2	37	91			
N-Nitrosodi-n-propylamine	67	10	100.0	0	66.9	45.4	105			
4-Nitrophenol	110	10	200.0	0	57.2	33.4	104			
Pentachlorophenol	130	20	200.0	0	66.4	29.5	94.9			
Phenol	110	10	200.0	0	56.4	30.6	119			
Pyrene	74	10	100.0	0	73.7	26.2	120			
1,2,4-Trichlorobenzene	57	10	100.0	0	57.3	39.9	125			
Surr: 2-Fluorophenol	110		200.0		57.4	15	123			
Surr: Phenol-d5	110		200.0		54.5	4.13	124			
Surr: 2,4,6-Tribromophenol	150		200.0		72.8	18.4	134			
Surr: Nitrobenzene-d5	68		100.0		68.4	28.8	134			
Surr: 2-Fluorobiphenyl	62		100.0		62.4	35.9	125			
Surr: 4-Terphenyl-d14	89		100.0		88.8	15	146			

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

Sample Log-In Check List

Client Name: Western Refining Gallup

Work Order Number: 1606613

RcptNo: 1

Received by/date: LM 06/11/16

Logged By: Anne Thorne

6/11/2016 8:54:00 AM

Anne Thorne

Completed By: Anne Thorne

6/12/2016

Anne Thorne

Reviewed By: SC 6/13/16

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH: 15
(≤2 or >12 unless noted)
Adjusted? NO
Checked by: *[Signature]*

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	2.8	Good				

www.hallenvironmental.com

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

Analysis Request

Received by:	Date	Time
--------------	------	------

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



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

July 26, 2016

Cheryl Johnson

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

RE: 2016 2nd QTR MKTF/PW-4

OrderNo.: 1606615

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/11/2016 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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606615-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	0.019	0.0033	0.010		µg/L	1	6/15/2016 4:01:07 PM	25857
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	1.2	0.69	1.0		mg/L	1	6/13/2016 8:35:06 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 8:35:06 PM	25809
Surr: DNOP	107	0	70-141		%Rec	1	6/13/2016 8:35:06 PM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	5.2	0.13	0.25		mg/L	5	6/14/2016 3:23:49 PM	A34904
Surr: BFB	126	0	66.4-120	S	%Rec	5	6/14/2016 3:23:49 PM	A34904
EPA METHOD 300.0: ANIONS								
Analyst: MRA								
Fluoride	2.7	0.023	0.10		mg/L	1	6/14/2016 1:08:31 AM	AR3488
Chloride	390	1.4	25		mg/L	50	6/30/2016 12:14:31 AM	A35338
Bromide	0.16	0.032	0.10		mg/L	1	6/14/2016 1:08:31 AM	AR3488
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 1:08:31 AM	AR3488
Sulfate	50	0.064	0.50		mg/L	1	6/14/2016 1:08:31 AM	AR3488
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 4:02:16 AM	AR3488
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.13	0.0013	0.0020		mg/L	1	6/28/2016 6:24:07 PM	B35265
Cadmium	ND	0.00075	0.0020		mg/L	1	6/28/2016 6:24:07 PM	B35265
Calcium	55	0.26	1.0		mg/L	1	6/28/2016 6:24:07 PM	B35265
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2016 6:24:07 PM	B35265
Copper	ND	0.0040	0.0060		mg/L	1	6/28/2016 6:24:07 PM	B35265
Iron	0.081	0.0091	0.020		mg/L	1	6/28/2016 6:24:07 PM	B35265
Magnesium	8.9	0.013	1.0		mg/L	1	6/28/2016 6:24:07 PM	B35265
Manganese	0.33	0.00032	0.0020	*	mg/L	1	6/28/2016 6:24:07 PM	B35265
Potassium	2.5	0.18	1.0		mg/L	1	6/28/2016 6:24:07 PM	B35265
Silver	ND	0.0028	0.0050		mg/L	1	6/28/2016 6:24:07 PM	B35265
Sodium	550	0.96	10		mg/L	10	6/28/2016 6:26:03 PM	B35265
Zinc	0.0033	0.0028	0.010	J	mg/L	1	6/28/2016 6:24:07 PM	B35265
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	0.19	0.0011	0.0020		mg/L	1	6/28/2016 1:48:16 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:48:16 PM	25969
Chromium	0.0027	0.0022	0.0060	J	mg/L	1	6/28/2016 1:48:16 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 1:48:16 PM	25969
Iron	2.6	0.036	0.10	*	mg/L	5	6/28/2016 1:49:57 PM	25969
Manganese	0.40	0.0015	0.0020	*	mg/L	1	6/28/2016 1:48:16 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:48:16 PM	25969
Zinc	0.012	0.0039	0.010		mg/L	1	6/28/2016 1:48:16 PM	25969

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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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606615-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0028	0.00014	0.0010		mg/L	1	7/6/2016 8:58:04 PM	C35457
Lead	0.00049	0.00017	0.00050	J	mg/L	1	7/6/2016 8:58:04 PM	C35457
Selenium	0.0061	0.00021	0.0010		mg/L	1	7/6/2016 8:58:04 PM	C35457
Uranium	0.033	0.00026	0.0025	*	mg/L	5	7/6/2016 9:01:08 PM	C35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0024	0.00029	0.0010		mg/L	1	6/28/2016 7:33:23 PM	25969
Lead	0.0034	0.000047	0.00050		mg/L	1	6/28/2016 7:33:23 PM	25969
Selenium	0.0046	0.00062	0.0050	J	mg/L	5	6/29/2016 11:06:50 AM	25969
Uranium	0.033	0.000025	0.0025	*	mg/L	5	6/29/2016 11:06:50 AM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:26:29 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Acenaphthylene	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Aniline	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Anthracene	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Azobenzene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benz(a)anthracene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benzo(a)pyrene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benzo(b)fluoranthene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benzo(g,h,i)perylene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benzo(k)fluoranthene	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benzoic acid	ND	13	100	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Benzyl alcohol	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Bis(2-chloroethoxy)methane	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Bis(2-chloroethyl)ether	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Bis(2-chloroisopropyl)ether	ND	9.5	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Bis(2-ethylhexyl)phthalate	18	13	50	JD	µg/L	1	6/22/2016 12:13:53 AM	25832
4-Bromophenyl phenyl ether	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Butyl benzyl phthalate	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Carbazole	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
4-Chloro-3-methylphenol	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
4-Chloroaniline	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2-Chloronaphthalene	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2-Chlorophenol	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
4-Chlorophenyl phenyl ether	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Chrysene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Di-n-butyl phthalate	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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	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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606615-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	28	9.9	50	JD	µg/L	1	6/22/2016 12:13:53 AM	25832
Dibenz(a,h)anthracene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Dibenzofuran	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
1,2-Dichlorobenzene	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
1,3-Dichlorobenzene	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
1,4-Dichlorobenzene	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
3,3'-Dichlorobenzidine	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Diethyl phthalate	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Dimethyl phthalate	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,4-Dichlorophenol	ND	12	100	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,4-Dimethylphenol	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
4,6-Dinitro-2-methylphenol	ND	9.0	100	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,4-Dinitrophenol	ND	14	100	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,4-Dinitrotoluene	ND	16	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,6-Dinitrotoluene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Fluoranthene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Fluorene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Hexachlorobenzene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Hexachlorobutadiene	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Hexachlorocyclopentadiene	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Hexachloroethane	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Indeno(1,2,3-cd)pyrene	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Isophorone	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
1-Methylnaphthalene	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2-Methylnaphthalene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2-Methylphenol	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
3+4-Methylphenol	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
N-Nitrosodi-n-propylamine	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
N-Nitrosodimethylamine	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
N-Nitrosodiphenylamine	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Naphthalene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2-Nitroaniline	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
3-Nitroaniline	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
4-Nitroaniline	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Nitrobenzene	ND	14	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2-Nitrophenol	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
4-Nitrophenol	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Pentachlorophenol	ND	12	100	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Phenanthrene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832

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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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606615-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	9.9	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Pyrene	ND	15	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Pyridine	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
1,2,4-Trichlorobenzene	ND	13	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,4,5-Trichlorophenol	ND	11	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
2,4,6-Trichlorophenol	ND	12	50	D	µg/L	1	6/22/2016 12:13:53 AM	25832
Surr: 2-Fluorophenol	56.6	0	15-123	D	%Rec	1	6/22/2016 12:13:53 AM	25832
Surr: Phenol-d5	50.4	0	4.13-124	D	%Rec	1	6/22/2016 12:13:53 AM	25832
Surr: 2,4,6-Tribromophenol	78.8	0	18.4-134	D	%Rec	1	6/22/2016 12:13:53 AM	25832
Surr: Nitrobenzene-d5	79.4	0	28.8-134	D	%Rec	1	6/22/2016 12:13:53 AM	25832
Surr: 2-Fluorobiphenyl	73.1	0	35.9-125	D	%Rec	1	6/22/2016 12:13:53 AM	25832
Surr: 4-Terphenyl-d14	47.2	0	15-146	D	%Rec	1	6/22/2016 12:13:53 AM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	1200	1.9	20		µg/L	20	6/17/2016 6:08:00 PM	R35008
Toluene	26	0.59	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Ethylbenzene	210	0.56	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Methyl tert-butyl ether (MTBE)	87	1.1	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2,4-Trimethylbenzene	130	0.55	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,3,5-Trimethylbenzene	9.7	0.58	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2-Dichloroethane (EDC)	ND	0.58	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2-Dibromoethane (EDB)	ND	0.56	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Naphthalene	25	0.46	10		µg/L	5	6/17/2016 6:31:00 PM	R35008
1-Methylnaphthalene	15	1.0	20	J	µg/L	5	6/17/2016 6:31:00 PM	R35008
2-Methylnaphthalene	2.8	0.79	20	J	µg/L	5	6/17/2016 6:31:00 PM	R35008
Acetone	ND	25	50		µg/L	5	6/17/2016 6:31:00 PM	R35008
Bromobenzene	ND	0.49	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Bromodichloromethane	ND	0.70	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Bromoform	ND	0.51	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Bromomethane	ND	3.9	15		µg/L	5	6/17/2016 6:31:00 PM	R35008
2-Butanone	ND	3.7	50		µg/L	5	6/17/2016 6:31:00 PM	R35008
Carbon disulfide	ND	3.0	50		µg/L	5	6/17/2016 6:31:00 PM	R35008
Carbon Tetrachloride	ND	0.54	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Chlorobenzene	ND	0.57	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Chloroethane	ND	0.96	10		µg/L	5	6/17/2016 6:31:00 PM	R35008
Chloroform	ND	0.44	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Chloromethane	ND	1.1	15		µg/L	5	6/17/2016 6:31:00 PM	R35008
2-Chlorotoluene	ND	2.0	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
4-Chlorotoluene	ND	0.64	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
cis-1,2-DCE	12	0.62	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606615-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.53	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2-Dibromo-3-chloropropane	ND	1.2	10		µg/L	5	6/17/2016 6:31:00 PM	R35008
Dibromochloromethane	ND	0.43	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Dibromomethane	ND	0.60	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2-Dichlorobenzene	ND	2.0	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,3-Dichlorobenzene	ND	0.72	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,4-Dichlorobenzene	ND	0.71	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Dichlorodifluoromethane	ND	1.8	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1-Dichloroethane	46	0.54	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1-Dichloroethene	18	0.54	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2-Dichloropropane	ND	0.55	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,3-Dichloropropane	ND	0.78	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
2,2-Dichloropropane	ND	0.83	10		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1-Dichloropropene	ND	0.67	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Hexachlorobutadiene	ND	0.99	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
2-Hexanone	ND	4.2	50		µg/L	5	6/17/2016 6:31:00 PM	R35008
Isopropylbenzene	13	0.52	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
4-Isopropyltoluene	1.6	0.70	5.0	J	µg/L	5	6/17/2016 6:31:00 PM	R35008
4-Methyl-2-pentanone	ND	2.1	50		µg/L	5	6/17/2016 6:31:00 PM	R35008
Methylene Chloride	ND	0.94	15		µg/L	5	6/17/2016 6:31:00 PM	R35008
n-Butylbenzene	4.9	0.80	15	J	µg/L	5	6/17/2016 6:31:00 PM	R35008
n-Propylbenzene	37	0.66	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
sec-Butylbenzene	2.4	0.62	5.0	J	µg/L	5	6/17/2016 6:31:00 PM	R35008
Styrene	ND	0.55	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
tert-Butylbenzene	ND	0.58	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1,1,2-Tetrachloroethane	ND	0.56	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1,2,2-Tetrachloroethane	ND	0.64	10		µg/L	5	6/17/2016 6:31:00 PM	R35008
Tetrachloroethene (PCE)	ND	0.76	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
trans-1,2-DCE	ND	2.0	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
trans-1,3-Dichloropropene	ND	0.52	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2,3-Trichlorobenzene	ND	0.56	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2,4-Trichlorobenzene	ND	0.66	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1,1-Trichloroethane	ND	0.46	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,1,2-Trichloroethane	ND	0.64	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Trichloroethene (TCE)	2.9	0.88	5.0	J	µg/L	5	6/17/2016 6:31:00 PM	R35008
Trichlorofluoromethane	ND	1.0	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
1,2,3-Trichloropropane	ND	1.0	10		µg/L	5	6/17/2016 6:31:00 PM	R35008
Vinyl chloride	ND	0.98	5.0		µg/L	5	6/17/2016 6:31:00 PM	R35008
Xylenes, Total	160	1.8	7.5		µg/L	5	6/17/2016 6:31:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-2

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 2:50:00 PM

Lab ID: 1606615-001

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	90.2	0	70-130		%Rec	5	6/17/2016 6:31:00 PM	R35008
Surr: 4-Bromofluorobenzene	101	0	70-130		%Rec	5	6/17/2016 6:31:00 PM	R35008
Surr: Dibromofluoromethane	92.6	0	70-130		%Rec	5	6/17/2016 6:31:00 PM	R35008
Surr: Toluene-d8	96.9	0	70-130		%Rec	5	6/17/2016 6:31:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:00:00 PM

Lab ID: 1606615-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

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	6/13/2016 8:57:23 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 8:57:23 PM	25809
Surr: DNOP	111	0	70-141		%Rec	1	6/13/2016 8:57:23 PM	25809
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	0.69	0.025	0.050		mg/L	1	6/14/2016 4:37:19 PM	A34904
Surr: BFB	99.3	0	66.4-120		%Rec	1	6/14/2016 4:37:19 PM	A34904
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	0.30	0.023	0.10		mg/L	1	6/14/2016 1:33:20 AM	AR3488
Chloride	100	0.55	10		mg/L	20	6/30/2016 12:26:56 AM	A35338
Bromide	0.54	0.032	0.10		mg/L	1	6/14/2016 1:33:20 AM	AR3488
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 1:33:20 AM	AR3488
Sulfate	340	2.8	10		mg/L	20	6/30/2016 12:26:56 AM	A35338
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 4:14:41 AM	AR3488
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.040	0.0013	0.0020		mg/L	1	6/28/2016 6:27:58 PM	B35265
Cadmium	ND	0.00075	0.0020		mg/L	1	6/28/2016 6:27:58 PM	B35265
Calcium	88	0.26	1.0		mg/L	1	6/28/2016 6:27:58 PM	B35265
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2016 6:27:58 PM	B35265
Copper	ND	0.0040	0.0060		mg/L	1	6/28/2016 6:27:58 PM	B35265
Iron	0.014	0.0091	0.020	J	mg/L	1	6/28/2016 6:27:58 PM	B35265
Magnesium	19	0.013	1.0		mg/L	1	6/28/2016 6:27:58 PM	B35265
Manganese	0.031	0.00032	0.0020		mg/L	1	6/28/2016 6:27:58 PM	B35265
Potassium	1.0	0.18	1.0		mg/L	1	6/28/2016 6:27:58 PM	B35265
Silver	ND	0.0028	0.0050		mg/L	1	6/28/2016 6:27:58 PM	B35265
Sodium	310	0.48	5.0		mg/L	5	6/28/2016 6:29:57 PM	B35265
Zinc	0.011	0.0028	0.010		mg/L	1	6/28/2016 6:27:58 PM	B35265
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.33	0.0011	0.0020		mg/L	1	6/28/2016 1:53:44 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 1:53:44 PM	25969
Chromium	0.0075	0.0022	0.0060		mg/L	1	6/28/2016 1:53:44 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 1:53:44 PM	25969
Iron	6.2	0.072	0.20	*	mg/L	10	6/29/2016 1:33:17 PM	25969
Manganese	0.96	0.0015	0.0020	*	mg/L	1	6/28/2016 1:53:44 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 1:53:44 PM	25969
Zinc	0.028	0.0039	0.010		mg/L	1	6/28/2016 1:53:44 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0017	0.00069	0.0050	J	mg/L	5	7/6/2016 9:07:15 PM	C35457

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:00:00 PM

Lab ID: 1606615-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	ND	0.00017	0.00050		mg/L	1	7/6/2016 9:04:11 PM	C35457
Selenium	0.0040	0.00021	0.0010		mg/L	1	7/6/2016 9:04:11 PM	C35457
Uranium	0.038	0.00026	0.0025	*	mg/L	5	7/6/2016 9:07:15 PM	C35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0019	0.00029	0.0010		mg/L	1	6/28/2016 7:36:24 PM	25969
Lead	0.0098	0.000047	0.00050		mg/L	1	6/28/2016 7:36:24 PM	25969
Selenium	0.0038	0.00062	0.0050	J	mg/L	5	6/29/2016 11:09:50 AM	25969
Uranium	0.040	0.000025	0.0025	*	mg/L	5	6/29/2016 11:09:50 AM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000056	0.000053	0.00020	J	mg/L	1	6/28/2016 2:28:36 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Acenaphthylene	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Aniline	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Anthracene	ND	2.5	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Azobenzene	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Benzoic acid	ND	2.6	20		µg/L	1	6/22/2016 12:42:27 AM	25832
Benzyl alcohol	ND	3.0	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Bis(2-ethylhexyl)phthalate	3.2	2.6	10	J	µg/L	1	6/22/2016 12:42:27 AM	25832
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Carbazole	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
4-Chloroaniline	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2-Chlorophenol	ND	2.2	10		µg/L	1	6/22/2016 12:42:27 AM	25832
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Chrysene	ND	2.8	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Di-n-octyl phthalate	4.9	2.0	10	J	µg/L	1	6/22/2016 12:42:27 AM	25832

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:00:00 PM

Lab ID: 1606615-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Dibenzofuran	ND	2.5	10		µg/L	1	6/22/2016 12:42:27 AM	25832
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Diethyl phthalate	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/22/2016 12:42:27 AM	25832
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/22/2016 12:42:27 AM	25832
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/22/2016 12:42:27 AM	25832
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/22/2016 12:42:27 AM	25832
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Fluoranthene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Fluorene	ND	2.7	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Hexachloroethane	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Isophorone	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2-Methylphenol	ND	2.5	10		µg/L	1	6/22/2016 12:42:27 AM	25832
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/22/2016 12:42:27 AM	25832
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Naphthalene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2-Nitroaniline	ND	2.8	10		µg/L	1	6/22/2016 12:42:27 AM	25832
3-Nitroaniline	ND	2.9	10		µg/L	1	6/22/2016 12:42:27 AM	25832
4-Nitroaniline	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Nitrobenzene	ND	2.8	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2-Nitrophenol	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
4-Nitrophenol	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Pentachlorophenol	ND	2.3	20		µg/L	1	6/22/2016 12:42:27 AM	25832
Phenanthrene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Phenol	ND	2.0	10		µg/L	1	6/22/2016 12:42:27 AM	25832

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:00:00 PM

Lab ID: 1606615-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Pyridine	ND	2.2	10		µg/L	1	6/22/2016 12:42:27 AM	25832
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/22/2016 12:42:27 AM	25832
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/22/2016 12:42:27 AM	25832
Surr: 2-Fluorophenol	41.5	0	15-123		%Rec	1	6/22/2016 12:42:27 AM	25832
Surr: Phenol-d5	33.9	0	4.13-124		%Rec	1	6/22/2016 12:42:27 AM	25832
Surr: 2,4,6-Tribromophenol	67.0	0	18.4-134		%Rec	1	6/22/2016 12:42:27 AM	25832
Surr: Nitrobenzene-d5	78.0	0	28.8-134		%Rec	1	6/22/2016 12:42:27 AM	25832
Surr: 2-Fluorobiphenyl	73.8	0	35.9-125		%Rec	1	6/22/2016 12:42:27 AM	25832
Surr: 4-Terphenyl-d14	33.9	0	15-146		%Rec	1	6/22/2016 12:42:27 AM	25832
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Toluene	ND	0.12	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Methyl tert-butyl ether (MTBE)	400	2.1	10		µg/L	10	6/17/2016 6:54:00 PM	R35008
1,2,4-Trimethylbenzene	0.18	0.11	1.0	J	µg/L	1	6/17/2016 7:18:00 PM	R35008
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Naphthalene	ND	0.093	2.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Acetone	ND	4.9	10		µg/L	1	6/17/2016 7:18:00 PM	R35008
Bromobenzene	ND	0.098	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Bromoform	ND	0.10	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Bromomethane	ND	0.78	3.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
2-Butanone	ND	0.74	10		µg/L	1	6/17/2016 7:18:00 PM	R35008
Carbon disulfide	ND	0.60	10		µg/L	1	6/17/2016 7:18:00 PM	R35008
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Chloroethane	ND	0.19	2.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Chloroform	ND	0.089	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Chloromethane	ND	0.21	3.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:00:00 PM

Lab ID: 1606615-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Dibromomethane	ND	0.12	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,4-Dichlorobenzene	0.14	0.14	1.0	J	µg/L	1	6/17/2016 7:18:00 PM	R35008
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
2-Hexanone	ND	0.84	10		µg/L	1	6/17/2016 7:18:00 PM	R35008
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/17/2016 7:18:00 PM	R35008
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
sec-Butylbenzene	0.60	0.12	1.0	J	µg/L	1	6/17/2016 7:18:00 PM	R35008
Styrene	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/17/2016 7:18:00 PM	R35008
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/17/2016 7:18:00 PM	R35008
Surr: 1,2-Dichloroethane-d4	89.4	0	70-130		%Rec	1	6/17/2016 7:18:00 PM	R35008

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
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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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-33

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:00:00 PM

Lab ID: 1606615-002

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	101	0	70-130		%Rec	1	6/17/2016 7:18:00 PM	R35008
Surr: Dibromofluoromethane	91.5	0	70-130		%Rec	1	6/17/2016 7:18:00 PM	R35008
Surr: Toluene-d8	101	0	70-130		%Rec	1	6/17/2016 7:18:00 PM	R35008

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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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:20:00 PM

Lab ID: 1606615-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: TOM	
Diesel Range Organics (DRO)	2.5	0.69	1.0		mg/L	1	6/13/2016 9:19:16 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 9:19:16 PM	25809
Surr: DNOP	109	0	70-141		%Rec	1	6/13/2016 9:19:16 PM	25809
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	27	1.3	2.5		mg/L	50	6/14/2016 5:01:56 PM	A34904
Surr: BFB	105	0	66.4-120		%Rec	50	6/14/2016 5:01:56 PM	A34904
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	0.37	0.023	0.10		mg/L	1	6/14/2016 1:58:10 AM	AR3488
Chloride	99	0.55	10		mg/L	20	6/14/2016 2:10:34 AM	AR3488
Bromide	0.096	0.032	0.10	J	mg/L	1	6/14/2016 1:58:10 AM	AR3488
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/14/2016 1:58:10 AM	AR3488
Sulfate	4.2	0.064	0.50		mg/L	1	6/14/2016 1:58:10 AM	AR3488
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 4:27:06 AM	AR3488
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	1.1	0.013	0.020		mg/L	10	6/28/2016 6:33:38 PM	B35265
Cadmium	ND	0.00075	0.0020		mg/L	1	6/28/2016 6:31:56 PM	B35265
Calcium	120	2.6	10		mg/L	10	6/28/2016 6:33:38 PM	B35265
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2016 6:31:56 PM	B35265
Copper	ND	0.0040	0.0060		mg/L	1	6/28/2016 6:31:56 PM	B35265
Iron	2.9	0.091	0.20	*	mg/L	10	6/28/2016 6:33:38 PM	B35265
Magnesium	24	0.013	1.0		mg/L	1	6/28/2016 6:31:56 PM	B35265
Manganese	2.2	0.0032	0.020	*	mg/L	10	6/28/2016 6:33:38 PM	B35265
Potassium	0.82	0.18	1.0	J	mg/L	1	6/28/2016 6:31:56 PM	B35265
Silver	ND	0.0028	0.0050		mg/L	1	6/28/2016 6:31:56 PM	B35265
Sodium	250	0.96	10		mg/L	10	6/28/2016 6:33:38 PM	B35265
Zinc	ND	0.0028	0.010		mg/L	1	6/28/2016 6:31:56 PM	B35265
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	2.2	0.0053	0.010	*	mg/L	5	6/28/2016 2:04:50 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 2:03:05 PM	25969
Chromium	0.0062	0.0022	0.0060		mg/L	1	6/28/2016 2:03:05 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 2:03:05 PM	25969
Iron	17	0.36	1.0	*	mg/L	50	6/28/2016 2:06:39 PM	25969
Manganese	3.7	0.0076	0.010	*	mg/L	5	6/28/2016 2:04:50 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 2:03:05 PM	25969
Zinc	0.033	0.0039	0.010		mg/L	1	6/28/2016 2:03:05 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0025	0.00069	0.0050	J	mg/L	5	7/6/2016 9:13:22 PM	C35457

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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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:20:00 PM

Lab ID: 1606615-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	ND	0.00017	0.00050		mg/L	1	7/6/2016 9:10:18 PM	C35457
Selenium	0.0046	0.00021	0.0010		mg/L	1	7/6/2016 9:10:18 PM	C35457
Uranium	0.0028	0.000051	0.00050		mg/L	1	7/6/2016 9:10:18 PM	C35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0025	0.00029	0.0010		mg/L	1	6/28/2016 7:39:24 PM	25969
Lead	0.022	0.000047	0.00050	*	mg/L	1	6/28/2016 7:39:24 PM	25969
Selenium	0.0039	0.00062	0.0050	J	mg/L	5	6/29/2016 11:18:57 AM	25969
Uranium	0.0047	0.0000049	0.00050		mg/L	1	6/28/2016 7:39:24 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:34:57 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	3.9	2.6	10	J	µg/L	1	6/20/2016 11:29:28 PM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Aniline	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Anthracene	ND	2.5	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/20/2016 11:29:28 PM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Bis(2-ethylhexyl)phthalate	4.6	2.6	10	J	µg/L	1	6/20/2016 11:29:28 PM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Carbazole	5.3	2.3	10	J	µg/L	1	6/20/2016 11:29:28 PM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/20/2016 11:29:28 PM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Chrysene	ND	2.8	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Di-n-octyl phthalate	9.1	2.0	10	J	µg/L	1	6/20/2016 11:29:28 PM	25862

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:20:00 PM

Lab ID: 1606615-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/20/2016 11:29:28 PM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/20/2016 11:29:28 PM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/20/2016 11:29:28 PM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/20/2016 11:29:28 PM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/20/2016 11:29:28 PM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/20/2016 11:29:28 PM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/20/2016 11:29:28 PM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Fluorene	ND	2.7	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Isophorone	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
1-Methylnaphthalene	67	2.9	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2-Methylnaphthalene	11	2.9	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/20/2016 11:29:28 PM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/20/2016 11:29:28 PM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/20/2016 11:29:28 PM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Naphthalene	46	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/20/2016 11:29:28 PM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/20/2016 11:29:28 PM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/20/2016 11:29:28 PM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Phenol	19	2.0	10		µg/L	1	6/20/2016 11:29:28 PM	25862

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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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:20:00 PM

Lab ID: 1606615-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Pyridine	ND	2.2	10		µg/L	1	6/20/2016 11:29:28 PM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/20/2016 11:29:28 PM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/20/2016 11:29:28 PM	25862
Surr: 2-Fluorophenol	49.0	0	15-123		%Rec	1	6/20/2016 11:29:28 PM	25862
Surr: Phenol-d5	40.6	0	4.13-124		%Rec	1	6/20/2016 11:29:28 PM	25862
Surr: 2,4,6-Tribromophenol	81.6	0	18.4-134		%Rec	1	6/20/2016 11:29:28 PM	25862
Surr: Nitrobenzene-d5	83.3	0	28.8-134		%Rec	1	6/20/2016 11:29:28 PM	25862
Surr: 2-Fluorobiphenyl	79.5	0	35.9-125		%Rec	1	6/20/2016 11:29:28 PM	25862
Surr: 4-Terphenyl-d14	71.2	0	15-146		%Rec	1	6/20/2016 11:29:28 PM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	3800	4.8	50		µg/L	50	6/17/2016 7:41:00 PM	R35008
Toluene	35	1.2	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Ethylbenzene	500	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Methyl tert-butyl ether (MTBE)	6500	11	50		µg/L	50	6/17/2016 7:41:00 PM	R35008
1,2,4-Trimethylbenzene	25	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,3,5-Trimethylbenzene	1.7	1.2	10	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2-Dichloroethane (EDC)	ND	1.2	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2-Dibromoethane (EDB)	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Naphthalene	73	0.93	20		µg/L	10	6/17/2016 8:04:00 PM	R35008
1-Methylnaphthalene	88	2.0	40		µg/L	10	6/17/2016 8:04:00 PM	R35008
2-Methylnaphthalene	16	1.6	40	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
Acetone	82	49	100	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
Bromobenzene	ND	0.98	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Bromodichloromethane	ND	1.4	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Bromoform	ND	1.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Bromomethane	ND	7.8	30		µg/L	10	6/17/2016 8:04:00 PM	R35008
2-Butanone	31	7.4	100	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
Carbon disulfide	ND	6.0	100		µg/L	10	6/17/2016 8:04:00 PM	R35008
Carbon Tetrachloride	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Chlorobenzene	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Chloroethane	ND	1.9	20		µg/L	10	6/17/2016 8:04:00 PM	R35008
Chloroform	ND	0.89	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Chloromethane	ND	2.1	30		µg/L	10	6/17/2016 8:04:00 PM	R35008
2-Chlorotoluene	ND	4.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
4-Chlorotoluene	ND	1.3	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
cis-1,2-DCE	8.0	1.2	10	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
cis-1,3-Dichloropropene	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:20:00 PM

Lab ID: 1606615-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	2.3	20		µg/L	10	6/17/2016 8:04:00 PM	R35008
Dibromochloromethane	ND	0.87	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Dibromomethane	ND	1.2	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2-Dichlorobenzene	ND	4.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,3-Dichlorobenzene	ND	1.4	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,4-Dichlorobenzene	ND	1.4	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Dichlorodifluoromethane	ND	3.6	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1-Dichloroethane	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1-Dichloroethene	6.9	1.1	10	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2-Dichloropropane	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,3-Dichloropropane	ND	1.6	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
2,2-Dichloropropane	ND	1.7	20		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1-Dichloropropene	ND	1.3	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Hexachlorobutadiene	ND	2.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
2-Hexanone	ND	8.4	100		µg/L	10	6/17/2016 8:04:00 PM	R35008
Isopropylbenzene	21	1.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
4-Isopropyltoluene	3.8	1.4	10	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
4-Methyl-2-pentanone	ND	4.3	100		µg/L	10	6/17/2016 8:04:00 PM	R35008
Methylene Chloride	ND	1.9	30		µg/L	10	6/17/2016 8:04:00 PM	R35008
n-Butylbenzene	14	1.6	30	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
n-Propylbenzene	51	1.3	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
sec-Butylbenzene	7.4	1.2	10	J	µg/L	10	6/17/2016 8:04:00 PM	R35008
Styrene	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
tert-Butylbenzene	ND	1.2	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1,1,2-Tetrachloroethane	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1,2,2-Tetrachloroethane	ND	1.3	20		µg/L	10	6/17/2016 8:04:00 PM	R35008
Tetrachloroethene (PCE)	ND	1.5	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
trans-1,2-DCE	ND	4.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
trans-1,3-Dichloropropene	ND	1.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2,3-Trichlorobenzene	ND	1.1	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2,4-Trichlorobenzene	ND	1.3	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1,1-Trichloroethane	ND	0.91	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,1,2-Trichloroethane	ND	1.3	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Trichloroethene (TCE)	ND	1.8	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Trichlorofluoromethane	ND	2.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
1,2,3-Trichloropropane	ND	2.0	20		µg/L	10	6/17/2016 8:04:00 PM	R35008
Vinyl chloride	ND	2.0	10		µg/L	10	6/17/2016 8:04:00 PM	R35008
Xylenes, Total	62	3.7	15		µg/L	10	6/17/2016 8:04:00 PM	R35008
Surr: 1,2-Dichloroethane-d4	90.9	0	70-130		%Rec	10	6/17/2016 8:04:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-22

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 1:20:00 PM

Lab ID: 1606615-003

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	104	0	70-130		%Rec	10	6/17/2016 8:04:00 PM	R35008
Surr: Dibromofluoromethane	93.5	0	70-130		%Rec	10	6/17/2016 8:04:00 PM	R35008
Surr: Toluene-d8	97.6	0	70-130		%Rec	10	6/17/2016 8:04:00 PM	R35008

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
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 11:15:00 AM

Lab ID: 1606615-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8015M/D: DIESEL RANGE							Analyst: JME	
Diesel Range Organics (DRO)	710	6.9	10		mg/L	10	6/16/2016 9:30:44 AM	25865
Motor Oil Range Organics (MRO)	ND	50	50		mg/L	10	6/16/2016 9:30:44 AM	25865
Surr: DNOP	0	0	70-141	S	%Rec	10	6/16/2016 9:30:44 AM	25865
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	38	1.3	2.5		mg/L	50	6/16/2016 1:17:49 PM	B34963
Surr: BFB	125	0	66.4-120	S	%Rec	50	6/16/2016 1:17:49 PM	B34963
EPA METHOD 300.0: ANIONS							Analyst: MRA	
Fluoride	0.75	0.11	0.50		mg/L	5	6/14/2016 11:21:05 PM	R34930
Chloride	240	0.55	10		mg/L	20	6/14/2016 11:33:30 PM	R34930
Bromide	1.4	0.16	0.50		mg/L	5	6/14/2016 11:21:05 PM	R34930
Phosphorus, Orthophosphate (As P)	ND	1.1	2.5	H	mg/L	5	6/14/2016 11:21:05 PM	R34930
Sulfate	0.36	0.32	2.5	J	mg/L	5	6/14/2016 11:21:05 PM	R34930
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 11:58:19 PM	R34930
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.66	0.0013	0.0020		mg/L	1	6/28/2016 6:35:33 PM	B35265
Cadmium	ND	0.00075	0.0020		mg/L	1	6/28/2016 6:35:33 PM	B35265
Calcium	68	0.26	1.0		mg/L	1	6/28/2016 6:35:33 PM	B35265
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2016 6:35:33 PM	B35265
Copper	ND	0.0040	0.0060		mg/L	1	6/28/2016 6:35:33 PM	B35265
Iron	2.6	0.045	0.10	*	mg/L	5	6/28/2016 6:37:27 PM	B35265
Magnesium	12	0.013	1.0		mg/L	1	6/28/2016 6:35:33 PM	B35265
Manganese	1.8	0.0016	0.010	*	mg/L	5	6/28/2016 6:37:27 PM	B35265
Potassium	1.3	0.18	1.0		mg/L	1	6/28/2016 6:35:33 PM	B35265
Silver	ND	0.0028	0.0050		mg/L	1	6/28/2016 6:35:33 PM	B35265
Sodium	460	0.48	5.0		mg/L	5	6/28/2016 6:37:27 PM	B35265
Zinc	ND	0.0028	0.010		mg/L	1	6/28/2016 6:35:33 PM	B35265
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.80	0.0011	0.0020		mg/L	1	6/28/2016 2:08:26 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 2:08:26 PM	25969
Chromium	0.0029	0.0022	0.0060	J	mg/L	1	6/28/2016 2:08:26 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 2:08:26 PM	25969
Iron	4.1	0.036	0.10	*	mg/L	5	6/28/2016 2:10:22 PM	25969
Manganese	1.7	0.0076	0.010	*	mg/L	5	6/28/2016 2:10:22 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 2:08:26 PM	25969
Zinc	0.016	0.0039	0.010		mg/L	1	6/28/2016 2:08:26 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.010	0.00014	0.0010	*	mg/L	1	7/6/2016 9:16:25 PM	C35457

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	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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 11:15:00 AM

Lab ID: 1606615-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.00065	0.00017	0.00050		mg/L	1	7/6/2016 9:16:25 PM	C35457
Selenium	0.0090	0.0011	0.0050		mg/L	5	7/6/2016 9:25:40 PM	C35457
Uranium	0.0022	0.000051	0.00050		mg/L	1	7/6/2016 9:16:25 PM	C35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.013	0.0029	0.010	*	mg/L	10	6/29/2016 11:21:57 AM	25969
Lead	0.0094	0.000047	0.00050		mg/L	1	6/28/2016 7:42:25 PM	25969
Selenium	0.0094	0.0012	0.010	J	mg/L	10	6/29/2016 11:21:57 AM	25969
Uranium	0.0056	0.0000049	0.00050		mg/L	1	6/28/2016 7:42:25 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:36:56 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Acenaphthylene	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Aniline	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Anthracene	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Azobenzene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benz(a)anthracene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benzo(a)pyrene	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benzo(b)fluoranthene	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benzo(g,h,i)perylene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benzo(k)fluoranthene	ND	15	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benzoic acid	ND	13	100	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Benzyl alcohol	ND	15	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Bis(2-chloroethoxy)methane	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Bis(2-chloroethyl)ether	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Bis(2-chloroisopropyl)ether	ND	9.5	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Bis(2-ethylhexyl)phthalate	70	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4-Bromophenyl phenyl ether	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Butyl benzyl phthalate	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Carbazole	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4-Chloro-3-methylphenol	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4-Chloroaniline	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2-Chloronaphthalene	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2-Chlorophenol	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4-Chlorophenyl phenyl ether	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Chrysene	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Di-n-butyl phthalate	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Di-n-octyl phthalate	30	9.9	50	JD	µg/L	1	6/20/2016 11:57:31 PM	25862

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	D	Sample Diluted Due to Matrix	E	Value above quantitation range
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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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 11:15:00 AM

Lab ID: 1606615-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Dibenzofuran	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
1,2-Dichlorobenzene	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
1,3-Dichlorobenzene	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
1,4-Dichlorobenzene	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
3,3'-Dichlorobenzidine	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Diethyl phthalate	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Dimethyl phthalate	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,4-Dichlorophenol	ND	12	100	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,4-Dimethylphenol	ND	15	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4,6-Dinitro-2-methylphenol	ND	9.0	100	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,4-Dinitrophenol	ND	14	100	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,4-Dinitrotoluene	ND	16	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,6-Dinitrotoluene	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Fluoranthene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Fluorene	380	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Hexachlorobenzene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Hexachlorobutadiene	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Hexachlorocyclopentadiene	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Hexachloroethane	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Indeno(1,2,3-cd)pyrene	ND	15	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Isophorone	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
1-Methylnaphthalene	7800	150	500	D	µg/L	10	6/22/2016 1:39:09 AM	25862
2-Methylnaphthalene	5600	140	500	D	µg/L	10	6/22/2016 1:39:09 AM	25862
2-Methylphenol	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
3+4-Methylphenol	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
N-Nitrosodi-n-propylamine	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
N-Nitrosodimethylamine	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
N-Nitrosodiphenylamine	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Naphthalene	2300	130	500	D	µg/L	10	6/22/2016 1:39:09 AM	25862
2-Nitroaniline	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
3-Nitroaniline	ND	15	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4-Nitroaniline	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Nitrobenzene	ND	14	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2-Nitrophenol	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
4-Nitrophenol	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Pentachlorophenol	ND	12	100	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Phenanthrene	720	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Phenol	ND	9.9	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 11:15:00 AM

Lab ID: 1606615-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	190	15	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Pyridine	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
1,2,4-Trichlorobenzene	ND	13	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,4,5-Trichlorophenol	ND	11	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
2,4,6-Trichlorophenol	ND	12	50	D	µg/L	1	6/20/2016 11:57:31 PM	25862
Surr: 2-Fluorophenol	16.8	0	15-123	D	%Rec	1	6/20/2016 11:57:31 PM	25862
Surr: Phenol-d5	14.9	0	4.13-124	D	%Rec	1	6/20/2016 11:57:31 PM	25862
Surr: 2,4,6-Tribromophenol	28.0	0	18.4-134	D	%Rec	1	6/20/2016 11:57:31 PM	25862
Surr: Nitrobenzene-d5	0	0	28.8-134	SD	%Rec	1	6/20/2016 11:57:31 PM	25862
Surr: 2-Fluorobiphenyl	45.9	0	35.9-125	D	%Rec	1	6/20/2016 11:57:31 PM	25862
Surr: 4-Terphenyl-d14	69.0	0	15-146	D	%Rec	1	6/20/2016 11:57:31 PM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	3200	4.8	50		µg/L	50	6/17/2016 8:27:00 PM	R35008
Toluene	980	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Ethylbenzene	300	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Methyl tert-butyl ether (MTBE)	1400	2.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2,4-Trimethylbenzene	1500	5.5	50		µg/L	50	6/17/2016 8:27:00 PM	R35008
1,3,5-Trimethylbenzene	520	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2-Dichloroethane (EDC)	ND	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2-Dibromoethane (EDB)	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Naphthalene	280	0.93	20		µg/L	10	6/17/2016 8:51:00 PM	R35008
1-Methylnaphthalene	140	2.0	40		µg/L	10	6/17/2016 8:51:00 PM	R35008
2-Methylnaphthalene	190	1.6	40		µg/L	10	6/17/2016 8:51:00 PM	R35008
Acetone	ND	49	100		µg/L	10	6/17/2016 8:51:00 PM	R35008
Bromobenzene	ND	0.98	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Bromodichloromethane	ND	1.4	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Bromoform	ND	1.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Bromomethane	ND	7.8	30		µg/L	10	6/17/2016 8:51:00 PM	R35008
2-Butanone	ND	7.4	100		µg/L	10	6/17/2016 8:51:00 PM	R35008
Carbon disulfide	ND	6.0	100		µg/L	10	6/17/2016 8:51:00 PM	R35008
Carbon Tetrachloride	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Chlorobenzene	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Chloroethane	ND	1.9	20		µg/L	10	6/17/2016 8:51:00 PM	R35008
Chloroform	ND	0.89	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Chloromethane	ND	2.1	30		µg/L	10	6/17/2016 8:51:00 PM	R35008
2-Chlorotoluene	ND	4.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
4-Chlorotoluene	ND	1.3	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
cis-1,2-DCE	34	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
cis-1,3-Dichloropropene	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 11:15:00 AM

Lab ID: 1606615-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	2.3	20		µg/L	10	6/17/2016 8:51:00 PM	R35008
Dibromochloromethane	ND	0.87	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Dibromomethane	ND	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2-Dichlorobenzene	ND	4.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,3-Dichlorobenzene	ND	1.4	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,4-Dichlorobenzene	ND	1.4	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Dichlorodifluoromethane	ND	3.6	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1-Dichloroethane	96	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1-Dichloroethene	56	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2-Dichloropropane	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,3-Dichloropropane	ND	1.6	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
2,2-Dichloropropane	ND	1.7	20		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1-Dichloropropene	ND	1.3	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Hexachlorobutadiene	ND	2.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
2-Hexanone	ND	8.4	100		µg/L	10	6/17/2016 8:51:00 PM	R35008
Isopropylbenzene	33	1.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
4-Isopropyltoluene	20	1.4	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
4-Methyl-2-pentanone	ND	4.3	100		µg/L	10	6/17/2016 8:51:00 PM	R35008
Methylene Chloride	ND	1.9	30		µg/L	10	6/17/2016 8:51:00 PM	R35008
n-Butylbenzene	74	1.6	30		µg/L	10	6/17/2016 8:51:00 PM	R35008
n-Propylbenzene	65	1.3	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
sec-Butylbenzene	22	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Styrene	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
tert-Butylbenzene	ND	1.2	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1,1,2-Tetrachloroethane	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1,2,2-Tetrachloroethane	ND	1.3	20		µg/L	10	6/17/2016 8:51:00 PM	R35008
Tetrachloroethene (PCE)	1.5	1.5	10	J	µg/L	10	6/17/2016 8:51:00 PM	R35008
trans-1,2-DCE	ND	4.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
trans-1,3-Dichloropropene	ND	1.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2,3-Trichlorobenzene	ND	1.1	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2,4-Trichlorobenzene	ND	1.3	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1,1-Trichloroethane	16	0.91	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,1,2-Trichloroethane	ND	1.3	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Trichloroethene (TCE)	4.3	1.8	10	J	µg/L	10	6/17/2016 8:51:00 PM	R35008
Trichlorofluoromethane	ND	2.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
1,2,3-Trichloropropane	ND	2.0	20		µg/L	10	6/17/2016 8:51:00 PM	R35008
Vinyl chloride	ND	2.0	10		µg/L	10	6/17/2016 8:51:00 PM	R35008
Xylenes, Total	6100	18	75		µg/L	50	6/17/2016 8:27:00 PM	R35008
Surr: 1,2-Dichloroethane-d4	89.7	0	70-130		%Rec	10	6/17/2016 8:51:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-23

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 11:15:00 AM

Lab ID: 1606615-004

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	10	6/17/2016 8:51:00 PM	R35008
Surr: Dibromofluoromethane	91.5	0	70-130		%Rec	10	6/17/2016 8:51:00 PM	R35008
Surr: Toluene-d8	97.6	0	70-130		%Rec	10	6/17/2016 8:51:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: PW-4

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 3:30:00 PM

Lab ID: 1606615-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.014	0.0013	0.0020		mg/L	1	6/28/2016 6:39:30 PM	B35265
Cadmium	ND	0.00075	0.0020		mg/L	1	6/28/2016 6:39:30 PM	B35265
Calcium	190	1.3	5.0		mg/L	5	6/28/2016 6:41:33 PM	B35265
Chromium	ND	0.0018	0.0060		mg/L	1	6/28/2016 6:39:30 PM	B35265
Copper	ND	0.0040	0.0060		mg/L	1	6/28/2016 6:39:30 PM	B35265
Iron	0.11	0.0091	0.020		mg/L	1	6/28/2016 6:39:30 PM	B35265
Magnesium	40	0.013	1.0		mg/L	1	6/28/2016 6:39:30 PM	B35265
Manganese	0.0012	0.00032	0.0020	J	mg/L	1	6/28/2016 6:39:30 PM	B35265
Potassium	1.1	0.18	1.0		mg/L	1	6/28/2016 6:39:30 PM	B35265
Silver	ND	0.0028	0.0050		mg/L	1	6/28/2016 6:39:30 PM	B35265
Sodium	16	0.096	1.0		mg/L	1	6/28/2016 6:39:30 PM	B35265
Zinc	ND	0.0028	0.010		mg/L	1	6/28/2016 6:39:30 PM	B35265
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.014	0.0011	0.0020		mg/L	1	6/28/2016 2:12:22 PM	25969
Cadmium	ND	0.00062	0.0020		mg/L	1	6/28/2016 2:12:22 PM	25969
Chromium	ND	0.0022	0.0060		mg/L	1	6/28/2016 2:12:22 PM	25969
Copper	ND	0.0051	0.0060		mg/L	1	6/28/2016 2:12:22 PM	25969
Iron	0.26	0.0072	0.020		mg/L	1	6/28/2016 2:12:22 PM	25969
Manganese	0.0025	0.0015	0.0020		mg/L	1	6/28/2016 2:12:22 PM	25969
Silver	ND	0.0021	0.0050		mg/L	1	6/28/2016 2:12:22 PM	25969
Zinc	ND	0.0039	0.010		mg/L	1	6/28/2016 2:12:22 PM	25969
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0030	0.00014	0.0010		mg/L	1	7/6/2016 9:31:47 PM	C35457
Lead	ND	0.00017	0.00050		mg/L	1	7/6/2016 9:31:47 PM	C35457
Selenium	0.0017	0.00021	0.0010		mg/L	1	7/6/2016 9:31:47 PM	C35457
Uranium	0.0016	0.000051	0.00050		mg/L	1	7/6/2016 9:31:47 PM	C35457
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0036	0.00029	0.0010		mg/L	1	6/28/2016 7:45:26 PM	25969
Lead	ND	0.000047	0.00050		mg/L	1	6/28/2016 7:45:26 PM	25969
Selenium	0.0013	0.00062	0.0050	J	mg/L	5	6/29/2016 11:24:58 AM	25969
Uranium	0.0016	0.0000049	0.00050		mg/L	1	6/28/2016 7:45:26 PM	25969
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	ND	0.000053	0.00020		mg/L	1	6/28/2016 2:38:56 PM	26107
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862

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: PW-4

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 3:30:00 PM

Lab ID: 1606615-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 12:25:29 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Bis(2-ethylhexyl)phthalate	3.8	2.6	10	J	µg/L	1	6/21/2016 12:25:29 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 12:25:29 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Di-n-octyl phthalate	5.4	2.0	10	J	µg/L	1	6/21/2016 12:25:29 AM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 12:25:29 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 12:25:29 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 12:25:29 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 12:25:29 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 12:25:29 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: PW-4

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 3:30:00 PM

Lab ID: 1606615-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 12:25:29 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 12:25:29 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 12:25:29 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 12:25:29 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 12:25:29 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Phenol	ND	2.0	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 12:25:29 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 12:25:29 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 12:25:29 AM	25862
Surr: 2-Fluorophenol	43.3	0	15-123		%Rec	1	6/21/2016 12:25:29 AM	25862
Surr: Phenol-d5	36.7	0	4.13-124		%Rec	1	6/21/2016 12:25:29 AM	25862
Surr: 2,4,6-Tribromophenol	65.5	0	18.4-134		%Rec	1	6/21/2016 12:25:29 AM	25862
Surr: Nitrobenzene-d5	77.8	0	28.8-134		%Rec	1	6/21/2016 12:25:29 AM	25862
Surr: 2-Fluorobiphenyl	77.2	0	35.9-125		%Rec	1	6/21/2016 12:25:29 AM	25862
Surr: 4-Terphenyl-d14	59.6	0	15-146		%Rec	1	6/21/2016 12:25:29 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Toluene	ND	0.12	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: PW-4

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 3:30:00 PM

Lab ID: 1606615-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2,4-Trimethylbenzene	0.45	0.11	1.0	J	µg/L	1	6/17/2016 9:14:00 PM	R35008
1,3,5-Trimethylbenzene	0.31	0.12	1.0	J	µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Naphthalene	0.48	0.093	2.0	J	µg/L	1	6/17/2016 9:14:00 PM	R35008
1-Methylnaphthalene	0.72	0.20	4.0	J	µg/L	1	6/17/2016 9:14:00 PM	R35008
2-Methylnaphthalene	0.83	0.16	4.0	J	µg/L	1	6/17/2016 9:14:00 PM	R35008
Acetone	ND	4.9	10		µg/L	1	6/17/2016 9:14:00 PM	R35008
Bromobenzene	ND	0.098	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Bromoform	ND	0.10	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Bromomethane	ND	0.78	3.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
2-Butanone	ND	0.74	10		µg/L	1	6/17/2016 9:14:00 PM	R35008
Carbon disulfide	ND	0.60	10		µg/L	1	6/17/2016 9:14:00 PM	R35008
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Chloroethane	ND	0.19	2.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Chloroform	ND	0.089	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Chloromethane	ND	0.21	3.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Dibromomethane	ND	0.12	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
2-Hexanone	ND	0.84	10		µg/L	1	6/17/2016 9:14:00 PM	R35008

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 1606615

Date Reported: 7/26/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: PW-4

Project: 2016 2nd QTR MKTF/PW-4

Collection Date: 6/10/2016 3:30:00 PM

Lab ID: 1606615-005

Matrix: AQUEOUS

Received Date: 6/11/2016 8:54:00 AM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/17/2016 9:14:00 PM	R35008
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Styrene	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/17/2016 9:14:00 PM	R35008
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/17/2016 9:14:00 PM	R35008
Surr: 1,2-Dichloroethane-d4	91.1	0	70-130		%Rec	1	6/17/2016 9:14:00 PM	R35008
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	6/17/2016 9:14:00 PM	R35008
Surr: Dibromofluoromethane	92.9	0	70-130		%Rec	1	6/17/2016 9:14:00 PM	R35008
Surr: Toluene-d8	96.9	0	70-130		%Rec	1	6/17/2016 9:14:00 PM	R35008

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

Anatek Labs, Inc.

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

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

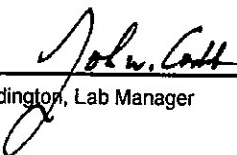
Batch #: 160616039
Project Name: 1606615

Analytical Results Report

Sample Number	160616039-001	Sampling Date	6/10/2016	Date/Time Received	6/16/2016 12:30 PM
Client Sample ID	1606615-005E / PW-4	Sampling Time	3:30 PM		
Matrix	Water	Sample Location			
Comments					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	6/21/2016	MER	EPA 335.4	

Authorized Signature


John Coddington, Lab Manager

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

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

Anatek Labs, Inc.

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

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

Batch #: 160616039
Project Name: 1606615

Analytical Results Report Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.516	mg/L	0.5	103.2	90-110	6/21/2016	6/21/2016

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
160617014-001	Cyanide	ND	0.490	mg/L	0.5	98.0	90-110	6/21/2016	6/21/2016

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	0.481	mg/L	0.5	96.2	1.9	0-20	6/21/2016	6/21/2016

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/L	0.01	6/21/2016	6/21/2016

AR Acceptable Range
ND Not Detected
PQL Practical Quantitation Limit
RPD Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013; NV:ID00013; OR:ID200001-002; WA:C585
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID MB-B	SampType: MBLK		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: PBW	Batch ID: B35265		RunNo: 35265							
Prep Date:	Analysis Date: 6/28/2016		SeqNo: 1090637		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: B35265		RunNo: 35265							
Prep Date:	Analysis Date: 6/28/2016		SeqNo: 1090638		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	99.3	85	115			
Cadmium	0.51	0.0020	0.5000	0	101	85	115			
Calcium	50	1.0	50.00	0	99.8	85	115			
Chromium	0.49	0.0060	0.5000	0	98.9	85	115			
Copper	0.49	0.0060	0.5000	0	97.5	85	115			
Iron	0.48	0.020	0.5000	0	96.1	85	115			
Magnesium	51	1.0	50.00	0	102	85	115			
Manganese	0.48	0.0020	0.5000	0	97.0	85	115			
Potassium	49	1.0	50.00	0	98.3	85	115			
Silver	0.10	0.0050	0.1000	0	100	85	115			
Sodium	50	1.0	50.00	0	100	85	115			
Zinc	0.49	0.010	0.5000	0	98.3	85	115			

Sample ID LLCS-B	SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals							
Client ID: BatchQC	Batch ID: B35265		RunNo: 35265							
Prep Date:	Analysis Date: 6/28/2016		SeqNo: 1090639		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0022	0.0020	0.002000	0	112	50	150			
Cadmium	0.0021	0.0020	0.002000	0	104	50	150			
Calcium	0.51	1.0	0.5000	0	103	50	150			J
Chromium	0.0063	0.0060	0.006000	0	105	50	150			

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	LLLCS-B		SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals				
Client ID:	BatchQC		Batch ID: B35265			RunNo: 35265				
Prep Date:			Analysis Date: 6/28/2016			SeqNo: 1090639		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.0062	0.0060	0.006000	0	104	50	150			
Iron	0.016	0.020	0.02000	0	77.9	50	150			J
Magnesium	0.53	1.0	0.5000	0	106	50	150			J
Manganese	0.0019	0.0020	0.002000	0	95.5	50	150			J
Potassium	0.45	1.0	0.5000	0	89.1	50	150			J
Silver	0.0048	0.0050	0.005000	0	96.8	50	150			J
Sodium	0.52	1.0	0.5000	0	104	50	150			J
Zinc	0.0053	0.010	0.005000	0	106	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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	MB-25969		SampType:	MBLK		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	PBW		Batch ID:	25969		RunNo:	35085			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085152	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-25969		SampType:	LCS		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	LCSW		Batch ID:	25969		RunNo:	35085			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085153	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.48	0.0020	0.5000	0	95.9	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.2	85	115			
Chromium	0.48	0.0060	0.5000	0	95.7	85	115			
Copper	0.48	0.0060	0.5000	0	95.2	85	115			
Iron	0.47	0.020	0.5000	0	94.8	85	115			
Manganese	0.47	0.0020	0.5000	0	94.1	85	115			
Silver	0.098	0.0050	0.1000	0	98.3	85	115			
Zinc	0.47	0.010	0.5000	0	93.7	85	115			

Sample ID	LLCS-25969		SampType:	LCSLL		TestCode:	EPA Method 200.7: Total Metals			
Client ID:	BatchQC		Batch ID:	25969		RunNo:	35085			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085154	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0022	0.0020	0.002000	0	108	50	150			
Cadmium	0.0014	0.0020	0.002000	0	67.5	50	150			J
Chromium	0.0058	0.0060	0.006000	0	96.7	50	150			J
Copper	0.0071	0.0060	0.006000	0	118	50	150			
Iron	0.017	0.020	0.02000	0	86.2	50	150			J
Manganese	0.0021	0.0020	0.002000	0	105	50	150			
Silver	0.0049	0.0050	0.005000	0	98.4	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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: C35457		RunNo: 35457					
Prep Date:			Analysis Date: 7/6/2016		SeqNo: 1098044		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	92.9	85	115			
Lead	0.012	0.00050	0.01250	0	92.8	85	115			
Selenium	0.024	0.0010	0.02500	0	94.4	85	115			
Uranium	0.012	0.00050	0.01250	0	93.7	85	115			

Sample ID	LLCS		SampType: LCSLL		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	BatchQC		Batch ID: C35457		RunNo: 35457					
Prep Date:			Analysis Date: 7/6/2016		SeqNo: 1098046		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	103	50	150			
Lead	0.00047	0.00050	0.0005000	0	94.1	50	150			J
Selenium	0.0012	0.0010	0.001000	0	116	50	150			
Uranium	0.00047	0.00050	0.0005000	0	93.3	50	150			J

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: C35457			RunNo: 35457					
Prep Date:		Analysis Date: 7/6/2016			SeqNo: 1098049		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	0.00023	0.0010								J
Uranium	ND	0.00050								

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	MB-25969		SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	PBW		Batch ID:	25969		RunNo:	35099			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085405	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-25969		SampType:	LCS		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	LCSW		Batch ID:	25969		RunNo:	35099			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085406	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.9	85	115			
Lead	0.012	0.00050	0.01250	0	94.7	85	115			
Selenium	0.024	0.0010	0.02500	0	95.4	85	115			
Uranium	0.013	0.00050	0.01250	0	102	85	115			

Sample ID	MSLLLCS-25969		SampType:	LCSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	BatchQC		Batch ID:	25969		RunNo:	35099			
Prep Date:	6/21/2016		Analysis Date:	6/22/2016		SeqNo:	1085407	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	106	50	150			
Lead	0.00048	0.00050	0.0005000	0	96.3	50	150			J
Selenium	0.00096	0.0010	0.001000	0	95.7	50	150			J
Uranium	0.00052	0.00050	0.0005000	0	104	50	150			

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	MB-26107		SampType: MBLK		TestCode: EPA Method 245.1: Mercury					
Client ID:	PBW		Batch ID: 26107		RunNo: 35280					
Prep Date:	6/27/2016		Analysis Date: 6/28/2016		SeqNo: 1091051		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercurv	ND	0.00020								

Sample ID	LCS-26107		SampType: LCS		TestCode: EPA Method 245.1: Mercury					
Client ID:	LCSW		Batch ID: 26107		RunNo: 35280					
Prep Date:	6/27/2016		Analysis Date: 6/28/2016		SeqNo: 1091052		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.4	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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: AR34887		RunNo: 34887							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1077666		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								
Nitrate+Nitrite as N	ND	0.20								

Sample ID LCS	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: AR34887		RunNo: 34887							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1077667		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			
Chloride	4.8	0.50	5.000	0	95.8	90	110			
Bromide	2.5	0.10	2.500	0	98.1	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.3	90	110			
Sulfate	9.6	0.50	10.00	0	96.4	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.7	90	110			

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R34930		RunNo: 34930							
Prep Date:	Analysis Date: 6/14/2016		SeqNo: 1078891		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	0.14	0.50								J
Nitrate+Nitrite as N	ND	0.20								

Sample ID LCS	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R34930		RunNo: 34930							
Prep Date:	Analysis Date: 6/14/2016		SeqNo: 1078892		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	105	90	110			
Chloride	5.0	0.50	5.000	0	99.4	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	LCS		SampType: Ics		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: R34930		RunNo: 34930					
Prep Date:			Analysis Date: 6/14/2016		SeqNo: 1078892		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	10	0.50	10.00	0	99.9	90	110			
Nitrate+Nitrite as N	3.6	0.20	3.500	0	102	90	110			

Sample ID	MB	SampType: MBLK			TestCode: EPA Method 300.0: Anions					
Client ID:	PBW	Batch ID: A35338			RunNo: 35338					
Prep Date:		Analysis Date: 6/29/2016			SeqNo: 1093234		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID	LCS		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSW		Batch ID: A35338		RunNo: 35338					
Prep Date:			Analysis Date: 6/29/2016		SeqNo: 1093235		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.1	0.50	5.000	0	102	90	110			
Sulfate	10	0.50	10.00	0	104	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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	MB-25857		SampType:	MBLK		TestCode:	EPA Method 8011/504.1: EDB				
Client ID:	PBW		Batch ID:	25857		RunNo:	34956				
Prep Date:	6/15/2016		Analysis Date:	6/15/2016		SeqNo:	1080029		Units:	µg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
1,2-Dibromoethane	ND	0.010									

Sample ID	LCS-25857		SampType: LCS		TestCode: EPA Method 8011/504.1: EDB					
Client ID:	LCSW		Batch ID: 25857		RunNo: 34956					
Prep Date:	6/15/2016		Analysis Date: 6/15/2016		SeqNo: 1080030		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.090	0.010	0.1000	0	90.5	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	LCS-25809		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 25809		RunNo: 34862					
Prep Date:	6/13/2016		Analysis Date: 6/13/2016		SeqNo: 1077098		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	99.4	71.3	139			
Surr: DNOP	0.50		0.5000		99.0	70	141			

Sample ID	MB-25809		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 25809		RunNo: 34862					
Prep Date:	6/13/2016		Analysis Date: 6/13/2016		SeqNo: 1077099		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		112	70	141			

Sample ID	LCS-25865		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 25865		RunNo: 34924					
Prep Date:	6/15/2016		Analysis Date: 6/15/2016		SeqNo: 1079784		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.2	1.0	5.000	0	105	71.3	139			
Surr: DNOP	0.51		0.5000		102	70	141			

Sample ID	MB-25865		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	PBW		Batch ID: 25865		RunNo: 34924					
Prep Date:	6/15/2016		Analysis Date: 6/15/2016		SeqNo: 1079785		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		110	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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	A34904	RunNo:	34904					
Prep Date:		Analysis Date:	6/14/2016	SeqNo:	1078014	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	21		20.00		103	66.4	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	A34904	RunNo:	34904					
Prep Date:		Analysis Date:	6/14/2016	SeqNo:	1078015	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	90.8	80	120			
Surr: BFB	23		20.00		113	66.4	120			

Sample ID	1606615-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-2	Batch ID:	A34904	RunNo:	34904					
Prep Date:		Analysis Date:	6/14/2016	SeqNo:	1078022	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	5.199	95.9	70	130			
Surr: BFB	130		100.0		134	66.4	120			S

Sample ID	1606615-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-2	Batch ID:	A34904	RunNo:	34904					
Prep Date:		Analysis Date:	6/14/2016	SeqNo:	1078023	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	5.199	95.0	70	130	0.290	20	
Surr: BFB	140		100.0		136	66.4	120	0	0	S

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	B34963	RunNo:	34963					
Prep Date:		Analysis Date:	6/16/2016	SeqNo:	1080612	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	22		20.00		109	66.4	120			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	B34963	RunNo:	34963					
Prep Date:		Analysis Date:	6/16/2016	SeqNo:	1080615	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	2.5UG GRO LCS		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSW		Batch ID: B34963		RunNo: 34963					
Prep Date:			Analysis Date: 6/16/2016		SeqNo: 1080615		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.42	0.050	0.5000	0	83.7	80	120			
Surr: BFB	24		20.00		119	66.4	120			

Sample ID	1606615-004AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	MKTF-23		Batch ID: B34963		RunNo: 34963					
Prep Date:			Analysis Date: 6/16/2016		SeqNo: 1080618		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	57	2.5	25.00	38.24	73.1	70	130			
Surr: BFB	1300		1000		128	66.4	120			S

Sample ID	1606615-004AMSD			SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range			
Client ID:	MKTF-23			Batch ID:	B34963		RunNo:	34963			
Prep Date:				Analysis Date:	6/16/2016		SeqNo:	1080619		Units:	mg/L
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	55	2.5	25.00	38.24	67.4	70	130	2.58	20	S	
Surr: BFB	1300		1000		127	66.4	120	0	0	S	

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	100ng lcs	SampType: LCS			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	LCSW	Batch ID: R35008			RunNo: 35008					
Prep Date:	Analysis Date: 6/17/2016			SeqNo: 1082049		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	16	1.0	20.00	0	78.1	70	130			
Toluene	16	1.0	20.00	0	79.8	70	130			
Chlorobenzene	16	1.0	20.00	0	77.8	70	130			
1,1-Dichloroethene	15	1.0	20.00	0	74.2	70	130			
Trichloroethene (TCE)	15	1.0	20.00	0	74.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.8	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: R35008			RunNo: 35008					
Prep Date:		Analysis Date: 6/17/2016			SeqNo: 1082050		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								

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R35008			RunNo: 35008					
Prep Date:		Analysis Date: 6/17/2016			SeqNo: 1082050	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	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								

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID: R35008			RunNo: 35008					
Prep Date:		Analysis Date: 6/17/2016			SeqNo: 1082050		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.2		10.00		92.0	70	130			
Surr: Toluene-d8	9.8		10.00		98.1	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	mb-25862		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 25862		RunNo: 35016					
Prep Date:	6/15/2016		Analysis Date: 6/20/2016		SeqNo: 1082703		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	6.6	20								J
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	2.8	10								J
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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	mb-25862		SampType: MBLK			TestCode: EPA Method 8270C: Semivolatiles				
Client ID:	PBW		Batch ID: 25862			RunNo: 35016				
Prep Date:	6/15/2016		Analysis Date: 6/20/2016			SeqNo: 1082703		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	110		200.0		55.3	15	123			
Surr: Phenol-d5	100		200.0		50.6	4.13	124			
Surr: 2,4,6-Tribromophenol	140		200.0		71.0	18.4	134			
Surr: Nitrobenzene-d5	74		100.0		74.1	28.8	134			
Surr: 2-Fluorobiphenyl	70		100.0		69.7	35.9	125			
Surr: 4-Terphenyl-d14	84		100.0		83.7	15	146			

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	lcs-25862		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles						
Client ID:	LCSW		Batch ID: 25862		RunNo: 35016						
Prep Date:	6/15/2016		Analysis Date: 6/20/2016		SeqNo: 1082704		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Acenaphthene	67	10	100.0	0	66.8	35	113				
4-Chloro-3-methylphenol	130	10	200.0	0	64.5	40.7	114				
2-Chlorophenol	130	10	200.0	0	65.3	37.6	113				
1,4-Dichlorobenzene	53	10	100.0	0	53.0	37.7	106				
2,4-Dinitrotoluene	69	10	100.0	0	69.0	37	91				
N-Nitrosodi-n-propylamine	70	10	100.0	0	70.1	45.4	105				
4-Nitrophenol	71	10	200.0	0	35.6	33.4	104				
Pentachlorophenol	100	20	200.0	0	51.9	29.5	94.9				
Phenol	100	10	200.0	0	49.8	30.6	119				
Pyrene	72	10	100.0	0	72.1	26.2	120				
1,2,4-Trichlorobenzene	63	10	100.0	0	62.7	39.9	125				
Surr: 2-Fluorophenol	100		200.0		51.8	15	123				
Surr: Phenol-d5	100		200.0		49.8	4.13	124				
Surr: 2,4,6-Tribromophenol	130		200.0		63.6	18.4	134				
Surr: Nitrobenzene-d5	68		100.0		67.6	28.8	134				
Surr: 2-Fluorobiphenyl	64		100.0		63.6	35.9	125				
Surr: 4-Terphenyl-d14	77		100.0		76.7	15	146				

Sample ID	mb-25832		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 25832		RunNo: 35052					
Prep Date:	6/14/2016		Analysis Date: 6/21/2016		SeqNo: 1083880		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	6.4	20								J
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	3.5	10								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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	mb-25832	SampType:	MBLK	TestCode:	EPA Method 8270C: Semivolatiles					
Client ID:	PBW	Batch ID:	25832	RunNo:	35052					
Prep Date:	6/14/2016	Analysis Date:	6/21/2016	SeqNo:	1083880	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	5.0	10								J
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	4.2	10								J
Diethyl phthalate	ND	10								
Dimethyl phthalate	4.4	10								J
2,4-Dichlorophenol	ND	20								
2,4-Dimethylphenol	ND	10								
4,6-Dinitro-2-methylphenol	ND	20								
2,4-Dinitrophenol	4.6	20								J
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								

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	mb-25832		SampType: MBLK		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	PBW		Batch ID: 25832		RunNo: 35052					
Prep Date:	6/14/2016		Analysis Date: 6/21/2016		SeqNo: 1083880		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	100		200.0		52.4	15	123			
Surr: Phenol-d5	95		200.0		47.6	4.13	124			
Surr: 2,4,6-Tribromophenol	160		200.0		81.2	18.4	134			
Surr: Nitrobenzene-d5	61		100.0		60.7	28.8	134			
Surr: 2-Fluorobiphenyl	56		100.0		56.3	35.9	125			
Surr: 4-Terphenyl-d14	110		100.0		108	15	146			

Sample ID	lcs-25832		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 25832		RunNo: 35052					
Prep Date:	6/14/2016		Analysis Date: 6/21/2016		SeqNo: 1083881		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Acenaphthene	68	10	100.0	0	67.5	35	113			
4-Chloro-3-methylphenol	150	10	200.0	0	76.6	40.7	114			
2-Chlorophenol	140	10	200.0	0	71.1	37.6	113			
1,4-Dichlorobenzene	53	10	100.0	0	53.3	37.7	106			
2,4-Dinitrotoluene	69	10	100.0	0	69.2	37	91			
N-Nitrosodi-n-propylamine	67	10	100.0	0	66.9	45.4	105			
4-Nitrophenol	110	10	200.0	0	57.2	33.4	104			
Pentachlorophenol	130	20	200.0	0	66.4	29.5	94.9			
Phenol	110	10	200.0	0	56.4	30.6	119			
Pyrene	74	10	100.0	0	73.7	26.2	120			
1,2,4-Trichlorobenzene	57	10	100.0	0	57.3	39.9	125			

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#: 1606615

26-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2nd QTR MKTF/PW-4

Sample ID	Ics-25832		SampType: LCS		TestCode: EPA Method 8270C: Semivolatiles					
Client ID:	LCSW		Batch ID: 25832		RunNo: 35052					
Prep Date:	6/14/2016		Analysis Date: 6/21/2016		SeqNo: 1083881		Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2-Fluorophenol	110		200.0		57.4	15	123			
Surr: Phenol-d5	110		200.0		54.5	4.13	124			
Surr: 2,4,6-Tribromophenol	150		200.0		72.8	18.4	134			
Surr: Nitrobenzene-d5	68		100.0		68.4	28.8	134			
Surr: 2-Fluorobiphenyl	62		100.0		62.4	35.9	125			
Surr: 4-Terphenyl-d14	89		100.0		88.8	15	146			

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: 1606615

RcptNo: 1

Received by/date: CM 06/11/16

Logged By: Anne Thorne 6/11/2016 8:54:00 AM

Anne Thorne

Completed By: Anne Thorne 6/13/2016

Anne Thorne

Reviewed By: *JA* 06/13/16

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: 14
(2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			



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

July 27, 2016

Cheryl Johnson

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

RE: 2016 2ND QTR (MKTF)

OrderNo.: 1606621

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory received 13 sample(s) on 6/10/2016 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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:00:00 AM

Lab ID: 1606621-001

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Toluene	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Naphthalene	ND	0.093	2.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Acetone	ND	4.9	10		µg/L	1	6/17/2016 10:01:00 PM	R35008
Bromobenzene	ND	0.098	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Bromoform	ND	0.10	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Bromomethane	ND	0.78	3.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
2-Butanone	ND	0.74	10		µg/L	1	6/17/2016 10:01:00 PM	R35008
Carbon disulfide	ND	0.60	10		µg/L	1	6/17/2016 10:01:00 PM	R35008
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Chloroethane	ND	0.19	2.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Chloroform	ND	0.089	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Chloromethane	ND	0.21	3.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Dibromomethane	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/17/2016 10:01:00 PM	R35008

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Field Blank

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:00:00 AM

Lab ID: 1606621-001

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
2-Hexanone	ND	0.84	10		µg/L	1	6/17/2016 10:01:00 PM	R35008
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/17/2016 10:01:00 PM	R35008
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Styrene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/17/2016 10:01:00 PM	R35008
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/17/2016 10:01:00 PM	R35008
Surr: 1,2-Dichloroethane-d4	83.9	0	70-130		%Rec	1	6/17/2016 10:01:00 PM	R35008
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	6/17/2016 10:01:00 PM	R35008
Surr: Dibromofluoromethane	93.7	0	70-130		%Rec	1	6/17/2016 10:01:00 PM	R35008
Surr: Toluene-d8	102	0	70-130		%Rec	1	6/17/2016 10:01:00 PM	R35008

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2016 2ND QTR (MKTF)

Collection Date:

Lab ID: 1606621-002

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 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	6/16/2016 2:35:14 AM	A34934
Surr: BFB	111	0	66.4-120		%Rec	1	6/16/2016 2:35:14 AM	A34934
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Toluene	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Naphthalene	ND	0.093	2.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Acetone	ND	4.9	10		µg/L	1	6/20/2016 4:22:00 PM	R35014
Bromobenzene	ND	0.098	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Bromoform	ND	0.10	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Bromomethane	ND	0.78	3.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
2-Butanone	ND	0.74	10		µg/L	1	6/20/2016 4:22:00 PM	R35014
Carbon disulfide	ND	0.60	10		µg/L	1	6/20/2016 4:22:00 PM	R35014
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Chloroethane	ND	0.19	2.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Chloroform	ND	0.089	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Chloromethane	ND	0.21	3.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Dibromomethane	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: Trip Blank

Project: 2016 2ND QTR (MKTF)

Collection Date:

Lab ID: 1606621-002

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
2-Hexanone	ND	0.84	10		µg/L	1	6/20/2016 4:22:00 PM	R35014
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/20/2016 4:22:00 PM	R35014
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Styrene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/20/2016 4:22:00 PM	R35014
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/20/2016 4:22:00 PM	R35014
Surr: 1,2-Dichloroethane-d4	92.8	0	70-130		%Rec	1	6/20/2016 4:22:00 PM	R35014
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	6/20/2016 4:22:00 PM	R35014
Surr: Dibromofluoromethane	98.1	0	70-130		%Rec	1	6/20/2016 4:22:00 PM	R35014
Surr: Toluene-d8	97.6	0	70-130		%Rec	1	6/20/2016 4:22:00 PM	R35014

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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.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:45:00 AM

Lab ID: 1606621-003

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	0.0045	0.0033	0.010	J	µg/L	1	6/15/2016 4:31:43 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/13/2016 9:41:20 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 9:41:20 PM	25809
Surr: DNOP	118	0	70-141		%Rec	1	6/13/2016 9:41:20 PM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	1.5	0.13	0.25		mg/L	5	6/16/2016 2:58:32 AM	A34934
Surr: BFB	115	0	66.4-120		%Rec	5	6/16/2016 2:58:32 AM	A34934
EPA METHOD 300.0: ANIONS								
Analyst: LGT								
Fluoride	0.15	0.023	0.10		mg/L	1	6/13/2016 7:24:59 PM	R34886
Chloride	2300	5.5	100		mg/L	200	6/30/2016 2:18:37 AM	B35338
Bromide	0.82	0.032	0.10		mg/L	1	6/13/2016 7:24:59 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 7:24:59 PM	R34886
Sulfate	230	1.3	10		mg/L	20	6/13/2016 7:37:23 PM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 12:47:41 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.074	0.0013	0.0020		mg/L	1	6/24/2016 2:50:06 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 2:50:06 PM	D35153
Calcium	300	1.3	5.0		mg/L	5	6/24/2016 2:52:06 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 2:50:06 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 2:50:06 PM	D35153
Iron	0.48	0.0091	0.020	*	mg/L	1	6/24/2016 2:50:06 PM	D35153
Magnesium	46	0.013	1.0		mg/L	1	6/24/2016 2:50:06 PM	D35153
Manganese	0.70	0.00032	0.0020	*	mg/L	1	6/24/2016 2:50:06 PM	D35153
Potassium	4.7	0.18	1.0		mg/L	1	6/24/2016 2:50:06 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 2:50:06 PM	D35153
Sodium	1300	1.9	20		mg/L	20	6/28/2016 4:26:54 PM	A35265
Zinc	0.0040	0.0028	0.010	J	mg/L	1	6/24/2016 2:50:06 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	0.75	0.0011	0.0020		mg/L	1	6/20/2016 6:31:01 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 6:31:01 PM	25917
Chromium	0.011	0.0022	0.0060		mg/L	1	6/24/2016 4:15:18 PM	25917
Copper	0.028	0.0051	0.0060		mg/L	1	6/20/2016 6:31:01 PM	25917
Iron	20	0.36	1.0	*	mg/L	50	6/24/2016 4:18:57 PM	25917
Manganese	1.6	0.0076	0.010	*	mg/L	5	6/24/2016 4:17:12 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 6:31:01 PM	25917
Zinc	0.073	0.0039	0.010		mg/L	1	6/24/2016 4:15:18 PM	25917

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:45:00 AM

Lab ID: 1606621-003

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0094	0.0028	0.020	J	mg/L	20	6/30/2016 8:35:25 PM	B35378
Lead	0.00096	0.00017	0.00050		mg/L	1	6/29/2016 8:05:52 PM	B35346
Selenium	0.033	0.0042	0.020		mg/L	20	6/30/2016 8:35:25 PM	B35378
Uranium	0.085	0.00026	0.0025	*	mg/L	5	6/30/2016 8:30:17 PM	B35378
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0050	0.00029	0.0010		mg/L	1	6/21/2016 7:26:45 PM	25917
Lead	0.030	0.00024	0.0025	*	mg/L	5	6/27/2016 7:45:09 PM	25917
Selenium	0.0061	0.0012	0.010	J	mg/L	10	6/27/2016 7:48:10 PM	25917
Uranium	0.099	0.000025	0.0025	*	mg/L	5	6/27/2016 7:45:09 PM	25917
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.00021	0.000053	0.00020		mg/L	1	6/24/2016 10:36:52 AM	26032
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 1:01:42 PM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Bis(2-ethylhexyl)phthalate	3.9	2.6	10	J	µg/L	1	6/21/2016 1:01:42 PM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 1:01:42 PM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862

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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:45:00 AM

Lab ID: 1606621-003

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.2	2.0	10	J	µg/L	1	6/21/2016 1:01:42 PM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 1:01:42 PM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Dimethyl phthalate	3.0	2.4	10	J	µg/L	1	6/21/2016 1:01:42 PM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 1:01:42 PM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 1:01:42 PM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 1:01:42 PM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 1:01:42 PM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 1:01:42 PM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 1:01:42 PM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 1:01:42 PM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 1:01:42 PM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 1:01:42 PM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862

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.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:45:00 AM

Lab ID: 1606621-003

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 1:01:42 PM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 1:01:42 PM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 1:01:42 PM	25862
Surr: 2-Fluorophenol	17.1	0	15-123		%Rec	1	6/21/2016 1:01:42 PM	25862
Surr: Phenol-d5	20.5	0	4.13-124		%Rec	1	6/21/2016 1:01:42 PM	25862
Surr: 2,4,6-Tribromophenol	20.2	0	18.4-134		%Rec	1	6/21/2016 1:01:42 PM	25862
Surr: Nitrobenzene-d5	95.0	0	28.8-134		%Rec	1	6/21/2016 1:01:42 PM	25862
Surr: 2-Fluorobiphenyl	84.5	0	35.9-125		%Rec	1	6/21/2016 1:01:42 PM	25862
Surr: 4-Terphenyl-d14	61.3	0	15-146		%Rec	1	6/21/2016 1:01:42 PM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	330	0.48	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Toluene	19	0.59	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Ethylbenzene	3.6	0.56	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
Methyl tert-butyl ether (MTBE)	82	1.1	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2,4-Trimethylbenzene	1.6	0.55	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.58	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2-Dichloroethane (EDC)	12	0.58	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.56	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Naphthalene	ND	0.46	10		µg/L	5	6/20/2016 4:46:00 PM	R35014
1-Methylnaphthalene	ND	1.0	20		µg/L	5	6/20/2016 4:46:00 PM	R35014
2-Methylnaphthalene	ND	0.79	20		µg/L	5	6/20/2016 4:46:00 PM	R35014
Acetone	ND	25	50		µg/L	5	6/20/2016 4:46:00 PM	R35014
Bromobenzene	ND	0.49	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Bromodichloromethane	ND	0.70	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Bromoform	ND	0.51	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Bromomethane	ND	3.9	15		µg/L	5	6/20/2016 4:46:00 PM	R35014
2-Butanone	ND	3.7	50		µg/L	5	6/20/2016 4:46:00 PM	R35014
Carbon disulfide	ND	3.0	50		µg/L	5	6/20/2016 4:46:00 PM	R35014
Carbon Tetrachloride	ND	0.54	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Chlorobenzene	ND	0.57	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Chloroethane	1.6	0.96	10	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
Chloroform	ND	0.44	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Chloromethane	ND	1.1	15		µg/L	5	6/20/2016 4:46:00 PM	R35014
2-Chlorotoluene	ND	2.0	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
4-Chlorotoluene	ND	0.64	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
cis-1,2-DCE	4.0	0.62	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:45:00 AM

Lab ID: 1606621-003

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.53	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	1.2	10		µg/L	5	6/20/2016 4:46:00 PM	R35014
Dibromochloromethane	ND	0.43	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Dibromomethane	ND	0.60	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2-Dichlorobenzene	ND	2.0	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,3-Dichlorobenzene	ND	0.72	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,4-Dichlorobenzene	ND	0.71	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Dichlorodifluoromethane	ND	1.8	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1-Dichloroethane	61	0.54	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1-Dichloroethene	68	0.54	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2-Dichloropropane	ND	0.55	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,3-Dichloropropane	ND	0.78	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
2,2-Dichloropropane	ND	0.83	10		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1-Dichloropropene	ND	0.67	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Hexachlorobutadiene	ND	0.99	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
2-Hexanone	ND	4.2	50		µg/L	5	6/20/2016 4:46:00 PM	R35014
Isopropylbenzene	2.2	0.52	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
4-Isopropyltoluene	ND	0.70	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
4-Methyl-2-pentanone	ND	2.1	50		µg/L	5	6/20/2016 4:46:00 PM	R35014
Methylene Chloride	ND	0.94	15		µg/L	5	6/20/2016 4:46:00 PM	R35014
n-Butylbenzene	ND	0.80	15		µg/L	5	6/20/2016 4:46:00 PM	R35014
n-Propylbenzene	1.5	0.66	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
sec-Butylbenzene	ND	0.62	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Styrene	ND	0.55	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
tert-Butylbenzene	ND	0.58	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.56	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.64	10		µg/L	5	6/20/2016 4:46:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.76	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
trans-1,2-DCE	ND	2.0	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.52	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.56	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.66	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1,1-Trichloroethane	1.2	0.46	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
1,1,2-Trichloroethane	1.5	0.64	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
Trichloroethene (TCE)	3.1	0.88	5.0	J	µg/L	5	6/20/2016 4:46:00 PM	R35014
Trichlorofluoromethane	ND	1.0	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
1,2,3-Trichloropropane	ND	1.0	10		µg/L	5	6/20/2016 4:46:00 PM	R35014
Vinyl chloride	8.6	0.98	5.0		µg/L	5	6/20/2016 4:46:00 PM	R35014
Xylenes, Total	7.7	1.8	7.5		µg/L	5	6/20/2016 4:46:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-26

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:45:00 AM

Lab ID: 1606621-003

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	94.1	0	70-130		%Rec	5	6/20/2016 4:46:00 PM	R35014
Surr: 4-Bromofluorobenzene	99.9	0	70-130		%Rec	5	6/20/2016 4:46:00 PM	R35014
Surr: Dibromofluoromethane	98.9	0	70-130		%Rec	5	6/20/2016 4:46:00 PM	R35014
Surr: Toluene-d8	97.4	0	70-130		%Rec	5	6/20/2016 4:46:00 PM	R35014

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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:55:00 AM

Lab ID: 1606621-004

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 5:17:23 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Diesel Range Organics (DRO)	0.89	0.69	1.0	J	mg/L	1	6/13/2016 10:03:14 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 10:03:14 PM	25809
Surr: DNOP	119	0	70-141		%Rec	1	6/13/2016 10:03:14 PM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Gasoline Range Organics (GRO)	13	0.51	1.0		mg/L	20	6/16/2016 3:21:47 AM	A34934
Surr: BFB	131	0	66.4-120	S	%Rec	20	6/16/2016 3:21:47 AM	A34934
EPA METHOD 300.0: ANIONS								
Fluoride	0.18	0.023	0.10		mg/L	1	6/13/2016 7:49:48 PM	R34886
Chloride	680	1.4	25		mg/L	50	6/30/2016 2:31:01 AM	B35338
Bromide	ND	0.032	0.10		mg/L	1	6/13/2016 7:49:48 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 7:49:48 PM	R34886
Sulfate	35	0.064	0.50		mg/L	1	6/13/2016 7:49:48 PM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 1:00:06 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Barium	0.32	0.0013	0.0020		mg/L	1	6/24/2016 2:54:00 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 2:54:00 PM	D35153
Calcium	130	1.3	5.0		mg/L	5	6/24/2016 2:56:01 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 2:54:00 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 2:54:00 PM	D35153
Iron	0.47	0.0091	0.020	*	mg/L	1	6/24/2016 2:54:00 PM	D35153
Magnesium	24	0.013	1.0		mg/L	1	6/24/2016 2:54:00 PM	D35153
Manganese	2.9	0.0016	0.010	*	mg/L	5	6/24/2016 2:56:01 PM	D35153
Potassium	1.2	0.18	1.0		mg/L	1	6/24/2016 2:54:00 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 2:54:00 PM	D35153
Sodium	590	0.96	10		mg/L	10	6/28/2016 4:28:50 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 2:54:00 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Barium	1.6	0.0053	0.010		mg/L	5	6/20/2016 6:36:27 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 6:34:38 PM	25917
Chromium	0.013	0.0022	0.0060		mg/L	1	6/24/2016 4:26:30 PM	25917
Copper	0.034	0.0051	0.0060		mg/L	1	6/20/2016 6:34:38 PM	25917
Iron	15	0.14	0.40	*	mg/L	20	6/24/2016 4:28:22 PM	25917
Manganese	5.6	0.030	0.040	*	mg/L	20	6/24/2016 4:28:22 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 6:34:38 PM	25917
Zinc	0.038	0.0039	0.010		mg/L	1	6/24/2016 4:26:30 PM	25917

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:55:00 AM

Lab ID: 1606621-004

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS								Analyst: JLF
Arsenic	0.0049	0.00014	0.0010		mg/L	1	6/29/2016 8:11:01 PM	B35346
Lead	0.0010	0.00017	0.00050		mg/L	1	6/29/2016 8:11:01 PM	B35346
Selenium	0.0096	0.00021	0.0010		mg/L	1	6/29/2016 8:11:01 PM	B35346
Uranium	0.030	0.00026	0.0025	*	mg/L	5	7/1/2016 5:41:38 PM	A35415
200.8 ICPMS METALS:TOTAL								Analyst: JLF
Arsenic	0.0041	0.00029	0.0010		mg/L	1	6/21/2016 7:29:46 PM	25917
Lead	0.043	0.00024	0.0025	*	mg/L	5	6/27/2016 7:57:14 PM	25917
Selenium	0.0070	0.0012	0.010	J	mg/L	10	6/28/2016 6:39:06 PM	25917
Uranium	0.034	0.000025	0.0025	*	mg/L	5	6/27/2016 7:57:14 PM	25917
EPA METHOD 245.1: MERCURY								Analyst: pmf
Mercury	0.00013	0.000053	0.00020	J	mg/L	1	6/24/2016 10:39:03 AM	26032
EPA METHOD 8270C: SEMIVOLATILES								Analyst: JDC
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 2:45:00 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Bis(2-ethylhexyl)phthalate	3.7	2.6	10	J	µg/L	1	6/21/2016 2:45:00 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 2:45:00 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862

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
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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:55:00 AM

Lab ID: 1606621-004

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.4	2.0	10	J	µg/L	1	6/21/2016 2:45:00 AM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 2:45:00 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 2:45:00 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 2:45:00 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 2:45:00 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 2:45:00 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
1-Methylnaphthalene	3.8	2.9	10	J	µg/L	1	6/21/2016 2:45:00 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 2:45:00 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 2:45:00 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Naphthalene	3.7	2.6	10	J	µg/L	1	6/21/2016 2:45:00 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 2:45:00 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 2:45:00 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 2:45:00 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:55:00 AM

Lab ID: 1606621-004

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	7.9	2.0	10	J	µg/L	1	6/21/2016 2:45:00 AM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 2:45:00 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 2:45:00 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 2:45:00 AM	25862
Surr: 2-Fluorophenol	50.2	0	15-123		%Rec	1	6/21/2016 2:45:00 AM	25862
Surr: Phenol-d5	44.1	0	4.13-124		%Rec	1	6/21/2016 2:45:00 AM	25862
Surr: 2,4,6-Tribromophenol	83.8	0	18.4-134		%Rec	1	6/21/2016 2:45:00 AM	25862
Surr: Nitrobenzene-d5	95.1	0	28.8-134		%Rec	1	6/21/2016 2:45:00 AM	25862
Surr: 2-Fluorobiphenyl	89.3	0	35.9-125		%Rec	1	6/21/2016 2:45:00 AM	25862
Surr: 4-Terphenyl-d14	80.2	0	15-146		%Rec	1	6/21/2016 2:45:00 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	990	4.8	50		µg/L	50	6/21/2016 2:59:00 PM	R35071
Toluene	13	1.2	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Ethylbenzene	190	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Methyl tert-butyl ether (MTBE)	480	2.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2,4-Trimethylbenzene	21	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,3,5-Trimethylbenzene	1.7	1.2	10	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2-Dichloroethane (EDC)	ND	1.2	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Naphthalene	19	0.93	20	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
1-Methylnaphthalene	8.2	2.0	40	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
2-Methylnaphthalene	ND	1.6	40		µg/L	10	6/20/2016 5:58:00 PM	R35014
Acetone	ND	49	100		µg/L	10	6/20/2016 5:58:00 PM	R35014
Bromobenzene	ND	0.98	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Bromodichloromethane	ND	1.4	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Bromoform	ND	1.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Bromomethane	ND	7.8	30		µg/L	10	6/20/2016 5:58:00 PM	R35014
2-Butanone	ND	7.4	100		µg/L	10	6/20/2016 5:58:00 PM	R35014
Carbon disulfide	ND	6.0	100		µg/L	10	6/20/2016 5:58:00 PM	R35014
Carbon Tetrachloride	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Chlorobenzene	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Chloroethane	ND	1.9	20		µg/L	10	6/20/2016 5:58:00 PM	R35014
Chloroform	ND	0.89	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Chloromethane	ND	2.1	30		µg/L	10	6/20/2016 5:58:00 PM	R35014
2-Chlorotoluene	ND	4.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
4-Chlorotoluene	ND	1.3	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
cis-1,2-DCE	100	1.2	10		µg/L	10	6/20/2016 5:58:00 PM	R35014

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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:55:00 AM

Lab ID: 1606621-004

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	2.3	20		µg/L	10	6/20/2016 5:58:00 PM	R35014
Dibromochloromethane	ND	0.87	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Dibromomethane	ND	1.2	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2-Dichlorobenzene	ND	4.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,3-Dichlorobenzene	ND	1.4	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,4-Dichlorobenzene	ND	1.4	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Dichlorodifluoromethane	ND	3.6	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1-Dichloroethane	610	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1-Dichloroethene	240	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2-Dichloropropane	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,3-Dichloropropane	ND	1.6	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
2,2-Dichloropropane	ND	1.7	20		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1-Dichloropropene	ND	1.3	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Hexachlorobutadiene	ND	2.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
2-Hexanone	ND	8.4	100		µg/L	10	6/20/2016 5:58:00 PM	R35014
Isopropylbenzene	93	1.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
4-Isopropyltoluene	2.4	1.4	10	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
4-Methyl-2-pentanone	ND	4.3	100		µg/L	10	6/20/2016 5:58:00 PM	R35014
Methylene Chloride	ND	1.9	30		µg/L	10	6/20/2016 5:58:00 PM	R35014
n-Butylbenzene	29	1.6	30	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
n-Propylbenzene	86	1.3	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
sec-Butylbenzene	15	1.2	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Styrene	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
tert-Butylbenzene	ND	1.2	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	1.3	20		µg/L	10	6/20/2016 5:58:00 PM	R35014
Tetrachloroethene (PCE)	6.0	1.5	10	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
trans-1,2-DCE	ND	4.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
trans-1,3-Dichloropropene	ND	1.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2,3-Trichlorobenzene	ND	1.1	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2,4-Trichlorobenzene	ND	1.3	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1,1-Trichloroethane	64	0.91	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,1,2-Trichloroethane	ND	1.3	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Trichloroethene (TCE)	64	1.8	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
Trichlorofluoromethane	ND	2.0	10		µg/L	10	6/20/2016 5:58:00 PM	R35014
1,2,3-Trichloropropane	ND	2.0	20		µg/L	10	6/20/2016 5:58:00 PM	R35014
Vinyl chloride	6.6	2.0	10	J	µg/L	10	6/20/2016 5:58:00 PM	R35014
Xylenes, Total	18	3.7	15		µg/L	10	6/20/2016 5:58:00 PM	R35014

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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
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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-25

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 7:55:00 AM

Lab ID: 1606621-004

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	94.6	0	70-130		%Rec	10	6/20/2016 5:58:00 PM	R35014
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	10	6/20/2016 5:58:00 PM	R35014
Surr: Dibromofluoromethane	97.3	0	70-130		%Rec	10	6/20/2016 5:58:00 PM	R35014
Surr: Toluene-d8	101	0	70-130		%Rec	10	6/20/2016 5:58:00 PM	R35014

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 8:46:00 AM

Lab ID: 1606621-005

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	0.0067	0.0033	0.010	J	µg/L	1	6/15/2016 5:32:45 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/13/2016 10:25:15 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 10:25:15 PM	25809
Surr: DNOP	112	0	70-141		%Rec	1	6/13/2016 10:25:15 PM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	0.16	0.025	0.050		mg/L	1	6/16/2016 3:45:19 AM	A34934
Surr: BFB	118	0	66.4-120		%Rec	1	6/16/2016 3:45:19 AM	A34934
EPA METHOD 300.0: ANIONS								
Analyst: LGT								
Fluoride	ND	0.023	0.10		mg/L	1	6/13/2016 8:14:38 PM	R34886
Chloride	770	2.8	50		mg/L	100	6/30/2016 2:43:26 AM	B35338
Bromide	1.5	0.032	0.10		mg/L	1	6/13/2016 8:14:38 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 8:14:38 PM	R34886
Sulfate	69	1.3	10		mg/L	20	6/13/2016 8:27:03 PM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 1:12:31 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.14	0.0013	0.0020		mg/L	1	6/24/2016 2:57:55 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 2:57:55 PM	D35153
Calcium	160	1.3	5.0		mg/L	5	6/24/2016 2:59:51 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 2:57:55 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 2:57:55 PM	D35153
Iron	0.013	0.0091	0.020	J	mg/L	1	6/24/2016 2:57:55 PM	D35153
Magnesium	34	0.013	1.0		mg/L	1	6/24/2016 2:57:55 PM	D35153
Manganese	0.018	0.00032	0.0020		mg/L	1	6/24/2016 2:57:55 PM	D35153
Potassium	1.5	0.18	1.0		mg/L	1	6/24/2016 2:57:55 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 2:57:55 PM	D35153
Sodium	560	0.96	10		mg/L	10	6/28/2016 4:37:52 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 2:57:55 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	0.33	0.0011	0.0020		mg/L	1	6/20/2016 6:38:15 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 6:38:15 PM	25917
Chromium	0.0051	0.0022	0.0060	J	mg/L	1	6/24/2016 4:30:19 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 6:38:15 PM	25917
Iron	4.8	0.072	0.20	*	mg/L	10	6/24/2016 4:32:04 PM	25917
Manganese	0.34	0.0015	0.0020	*	mg/L	1	6/24/2016 4:30:19 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 6:38:15 PM	25917
Zinc	0.017	0.0039	0.010		mg/L	1	6/24/2016 4:30:19 PM	25917

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 8:46:00 AM

Lab ID: 1606621-005

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS								
							Analyst: JLF	
Arsenic	0.0043	0.00069	0.0050	J	mg/L	5	7/1/2016 5:44:42 PM	A35415
Lead	ND	0.00017	0.00050		mg/L	1	6/29/2016 8:16:09 PM	B35346
Selenium	0.014	0.0011	0.0050		mg/L	5	7/1/2016 5:44:42 PM	A35415
Uranium	0.046	0.00026	0.0025	*	mg/L	5	7/1/2016 5:44:42 PM	A35415
200.8 ICPMS METALS:TOTAL								
							Analyst: JLF	
Arsenic	0.0022	0.00029	0.0010		mg/L	1	6/21/2016 7:32:46 PM	25917
Lead	0.0084	0.000047	0.00050		mg/L	1	6/21/2016 7:32:46 PM	25917
Selenium	0.0076	0.0012	0.010	J	mg/L	10	6/28/2016 6:48:12 PM	25917
Uranium	0.046	0.000025	0.0025	*	mg/L	5	6/27/2016 8:00:15 PM	25917
EPA METHOD 245.1: MERCURY								
							Analyst: pmf	
Mercury	0.000082	0.000053	0.00020	J	mg/L	1	6/24/2016 10:41:09 AM	26032
EPA METHOD 8270C: SEMIVOLATILES								
							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 3:12:48 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Bis(2-ethylhexyl)phthalate	3.9	2.6	10	J	µg/L	1	6/21/2016 3:12:48 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 3:12:48 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862

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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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 8:46:00 AM

Lab ID: 1606621-005

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.1	2.0	10	J	µg/L	1	6/21/2016 3:12:48 AM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 3:12:48 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 3:12:48 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 3:12:48 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 3:12:48 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 3:12:48 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 3:12:48 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 3:12:48 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 3:12:48 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 3:12:48 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 3:12:48 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 8:46:00 AM

Lab ID: 1606621-005

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 3:12:48 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 3:12:48 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 3:12:48 AM	25862
Surr: 2-Fluorophenol	43.9	0	15-123		%Rec	1	6/21/2016 3:12:48 AM	25862
Surr: Phenol-d5	36.2	0	4.13-124		%Rec	1	6/21/2016 3:12:48 AM	25862
Surr: 2,4,6-Tribromophenol	66.8	0	18.4-134		%Rec	1	6/21/2016 3:12:48 AM	25862
Surr: Nitrobenzene-d5	101	0	28.8-134		%Rec	1	6/21/2016 3:12:48 AM	25862
Surr: 2-Fluorobiphenyl	81.2	0	35.9-125		%Rec	1	6/21/2016 3:12:48 AM	25862
Surr: 4-Terphenyl-d14	64.3	0	15-146		%Rec	1	6/21/2016 3:12:48 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	0.75	0.096	1.0	J	µg/L	1	6/20/2016 6:22:00 PM	R35014
Toluene	ND	0.12	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Methyl tert-butyl ether (MTBE)	80	0.21	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2-Dichloroethane (EDC)	22	0.12	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Naphthalene	ND	0.093	2.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Acetone	ND	4.9	10		µg/L	1	6/20/2016 6:22:00 PM	R35014
Bromobenzene	ND	0.098	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Bromoform	ND	0.10	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Bromomethane	ND	0.78	3.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
2-Butanone	ND	0.74	10		µg/L	1	6/20/2016 6:22:00 PM	R35014
Carbon disulfide	ND	0.60	10		µg/L	1	6/20/2016 6:22:00 PM	R35014
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Chloroethane	ND	0.19	2.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Chloroform	ND	0.089	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Chloromethane	ND	0.21	3.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
cis-1,2-DCE	2.0	0.12	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 8:46:00 AM

Lab ID: 1606621-005

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Dibromomethane	ND	0.12	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1-Dichloroethane	37	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1-Dichloroethene	66	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
2-Hexanone	ND	0.84	10		µg/L	1	6/20/2016 6:22:00 PM	R35014
Isopropylbenzene	0.94	0.10	1.0	J	µg/L	1	6/20/2016 6:22:00 PM	R35014
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/20/2016 6:22:00 PM	R35014
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
n-Butylbenzene	0.26	0.16	3.0	J	µg/L	1	6/20/2016 6:22:00 PM	R35014
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
sec-Butylbenzene	0.42	0.12	1.0	J	µg/L	1	6/20/2016 6:22:00 PM	R35014
Styrene	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1,1-Trichloroethane	5.5	0.091	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,1,2-Trichloroethane	2.4	0.13	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Trichloroethene (TCE)	4.0	0.18	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/20/2016 6:22:00 PM	R35014
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/20/2016 6:22:00 PM	R35014

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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.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-31

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 8:46:00 AM

Lab ID: 1606621-005

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	91.7	0	70-130		%Rec	1	6/20/2016 6:22:00 PM	R35014
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	6/20/2016 6:22:00 PM	R35014
Surr: Dibromofluoromethane	99.5	0	70-130		%Rec	1	6/20/2016 6:22:00 PM	R35014
Surr: Toluene-d8	98.6	0	70-130		%Rec	1	6/20/2016 6:22:00 PM	R35014

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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 9:50:00 AM

Lab ID: 1606621-006

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 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	6/13/2016 10:47:10 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 10:47:10 PM	25809
Surr: DNOP	119	0	70-141		%Rec	1	6/13/2016 10:47:10 PM	25809
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	6/16/2016 4:08:51 AM	A34934
Surr: BFB	111	0	66.4-120		%Rec	1	6/16/2016 4:08:51 AM	A34934
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	ND	0.45	2.0		mg/L	20	6/13/2016 8:51:53 PM	R34886
Chloride	5300	14	250		mg/L	500	7/6/2016 1:13:12 AM	R35434
Bromide	3.4	0.65	2.0		mg/L	20	6/13/2016 8:51:53 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 8:39:28 PM	R34886
Sulfate	390	1.3	10		mg/L	20	6/13/2016 8:51:53 PM	R34886
Nitrate+Nitrite as N	ND	1.8	4.0		mg/L	20	6/30/2016 5:59:38 PM	R35376
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.13	0.0013	0.0020		mg/L	1	6/24/2016 3:01:46 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:01:46 PM	D35153
Calcium	440	1.3	5.0		mg/L	5	6/24/2016 3:03:42 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 3:01:46 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:01:46 PM	D35153
Iron	0.089	0.0091	0.020		mg/L	1	6/24/2016 3:01:46 PM	D35153
Magnesium	84	0.013	1.0		mg/L	1	6/24/2016 3:01:46 PM	D35153
Manganese	0.18	0.00032	0.0020	*	mg/L	1	6/24/2016 3:01:46 PM	D35153
Potassium	9.0	0.18	1.0		mg/L	1	6/24/2016 3:01:46 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:01:46 PM	D35153
Sodium	3000	4.8	50		mg/L	50	6/28/2016 4:39:48 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 3:01:46 PM	D35153
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.32	0.0011	0.0020		mg/L	1	6/20/2016 6:42:00 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 6:42:00 PM	25917
Chromium	ND	0.0022	0.0060		mg/L	1	6/20/2016 6:42:00 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 6:42:00 PM	25917
Iron	5.5	0.072	0.20	*	mg/L	10	6/24/2016 4:35:43 PM	25917
Manganese	0.31	0.0015	0.0020	*	mg/L	1	6/24/2016 4:34:01 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 6:42:00 PM	25917
Zinc	0.022	0.0039	0.010		mg/L	1	6/24/2016 4:34:01 PM	25917
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	ND	0.0069	0.050		mg/L	50	7/1/2016 6:06:09 PM	A35415

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	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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 9:50:00 AM

Lab ID: 1606621-006

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	ND	0.00084	0.0025		mg/L	5	7/1/2016 6:03:05 PM	A35415
Selenium	0.019	0.011	0.050	J	mg/L	50	7/1/2016 6:06:09 PM	A35415
Uranium	0.058	0.00026	0.0025	*	mg/L	5	7/1/2016 6:03:05 PM	A35415
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0031	0.0015	0.0050	J	mg/L	5	6/27/2016 8:03:15 PM	25917
Lead	0.0087	0.00024	0.0025		mg/L	5	6/27/2016 8:03:15 PM	25917
Selenium	0.0095	0.00062	0.0050		mg/L	5	6/27/2016 8:03:15 PM	25917
Uranium	0.058	0.000025	0.0025	*	mg/L	5	6/27/2016 8:03:15 PM	25917
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000096	0.000053	0.00020	J	mg/L	1	6/24/2016 10:43:16 AM	26032
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 3:40:33 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Bis(2-ethylhexyl)phthalate	4.0	2.6	10	J	µg/L	1	6/21/2016 3:40:33 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 3:40:33 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Di-n-octyl phthalate	4.9	2.0	10	J	µg/L	1	6/21/2016 3:40:33 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 9:50:00 AM

Lab ID: 1606621-006

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 3:40:33 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 3:40:33 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 3:40:33 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 3:40:33 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 3:40:33 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 3:40:33 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 3:40:33 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 3:40:33 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 3:40:33 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 3:40:33 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Phenol	ND	2.0	10		µg/L	1	6/21/2016 3:40:33 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 9:50:00 AM

Lab ID: 1606621-006

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 3:40:33 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 3:40:33 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 3:40:33 AM	25862
Surr: 2-Fluorophenol	43.9	0	15-123		%Rec	1	6/21/2016 3:40:33 AM	25862
Surr: Phenol-d5	38.0	0	4.13-124		%Rec	1	6/21/2016 3:40:33 AM	25862
Surr: 2,4,6-Tribromophenol	69.7	0	18.4-134		%Rec	1	6/21/2016 3:40:33 AM	25862
Surr: Nitrobenzene-d5	97.7	0	28.8-134		%Rec	1	6/21/2016 3:40:33 AM	25862
Surr: 2-Fluorobiphenyl	85.2	0	35.9-125		%Rec	1	6/21/2016 3:40:33 AM	25862
Surr: 4-Terphenyl-d14	63.4	0	15-146		%Rec	1	6/21/2016 3:40:33 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Toluene	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Methyl tert-butyl ether (MTBE)	0.62	0.21	1.0	J	µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Naphthalene	ND	0.093	2.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Acetone	ND	4.9	10		µg/L	1	6/20/2016 6:46:00 PM	R35014
Bromobenzene	ND	0.098	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Bromoform	ND	0.10	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Bromomethane	ND	0.78	3.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
2-Butanone	ND	0.74	10		µg/L	1	6/20/2016 6:46:00 PM	R35014
Carbon disulfide	ND	0.60	10		µg/L	1	6/20/2016 6:46:00 PM	R35014
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Chloroethane	ND	0.19	2.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Chloroform	ND	0.089	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Chloromethane	ND	0.21	3.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 9:50:00 AM

Lab ID: 1606621-006

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Dibromomethane	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1-Dichloroethane	0.62	0.11	1.0	J	µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
2-Hexanone	ND	0.84	10		µg/L	1	6/20/2016 6:46:00 PM	R35014
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/20/2016 6:46:00 PM	R35014
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Styrene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/20/2016 6:46:00 PM	R35014
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/20/2016 6:46:00 PM	R35014
Surr: 1,2-Dichloroethane-d4	92.3	0	70-130		%Rec	1	6/20/2016 6:46:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-40

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 9:50:00 AM

Lab ID: 1606621-006

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	101	0	70-130		%Rec	1	6/20/2016 6:46:00 PM	R35014
Surr: Dibromofluoromethane	96.4	0	70-130		%Rec	1	6/20/2016 6:46:00 PM	R35014
Surr: Toluene-d8	96.8	0	70-130		%Rec	1	6/20/2016 6:46:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 11:13:00 AM

Lab ID: 1606621-007

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 5:48:04 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/13/2016 11:09:03 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 11:09:03 PM	25809
Surr: DNOP	112	0	70-141		%Rec	1	6/13/2016 11:09:03 PM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	0.095	0.025	0.050		mg/L	1	6/16/2016 4:32:22 AM	A34934
Surr: BFB	109	0	66.4-120		%Rec	1	6/16/2016 4:32:22 AM	A34934
EPA METHOD 300.0: ANIONS								
Analyst: LGT								
Fluoride	1.3	0.023	0.10		mg/L	1	6/13/2016 9:04:17 PM	R34886
Chloride	890	2.8	50		mg/L	100	6/30/2016 3:08:15 AM	B35338
Bromide	1.3	0.032	0.10		mg/L	1	6/13/2016 9:04:17 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 9:04:17 PM	R34886
Sulfate	330	1.3	10		mg/L	20	6/13/2016 9:16:42 PM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 1:37:20 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.040	0.0013	0.0020		mg/L	1	6/24/2016 3:11:13 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:11:13 PM	D35153
Calcium	88	0.26	1.0		mg/L	1	6/24/2016 3:11:13 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 3:11:13 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:11:13 PM	D35153
Iron	0.016	0.0091	0.020	J	mg/L	1	6/24/2016 3:11:13 PM	D35153
Magnesium	17	0.013	1.0		mg/L	1	6/24/2016 3:11:13 PM	D35153
Manganese	0.0075	0.00032	0.0020		mg/L	1	6/24/2016 3:11:13 PM	D35153
Potassium	0.68	0.18	1.0	J	mg/L	1	6/24/2016 3:11:13 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:11:13 PM	D35153
Sodium	910	0.96	10		mg/L	10	6/28/2016 4:41:45 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 3:11:13 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	0.83	0.0011	0.0020		mg/L	1	6/20/2016 6:53:50 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 6:53:50 PM	25917
Chromium	0.0098	0.0022	0.0060		mg/L	1	6/24/2016 4:37:35 PM	25917
Copper	0.0066	0.0051	0.0060		mg/L	1	6/20/2016 6:53:50 PM	25917
Iron	13	0.14	0.40	*	mg/L	20	6/24/2016 4:41:17 PM	25917
Manganese	1.1	0.0076	0.010	*	mg/L	5	6/24/2016 4:39:25 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 6:53:50 PM	25917
Zinc	0.039	0.0039	0.010		mg/L	1	6/24/2016 4:37:35 PM	25917

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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.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 11:13:00 AM

Lab ID: 1606621-007

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0041	0.00069	0.0050	J	mg/L	5	7/1/2016 6:12:15 PM	A35415
Lead	ND	0.00017	0.00050		mg/L	1	7/1/2016 6:09:12 PM	A35415
Selenium	0.013	0.0011	0.0050		mg/L	5	7/1/2016 6:12:15 PM	A35415
Uranium	0.034	0.00026	0.0025	*	mg/L	5	7/1/2016 6:12:15 PM	A35415
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0033	0.00029	0.0010		mg/L	1	6/21/2016 7:38:47 PM	25917
Lead	0.022	0.000047	0.00050	*	mg/L	1	6/21/2016 7:38:47 PM	25917
Selenium	0.0069	0.0012	0.010	J	mg/L	10	6/28/2016 6:51:12 PM	25917
Uranium	0.035	0.000025	0.0025	*	mg/L	5	6/27/2016 8:06:16 PM	25917
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.00010	0.000053	0.00020	J	mg/L	1	6/24/2016 10:45:24 AM	26032
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 4:08:44 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Bis(2-ethylhexyl)phthalate	3.9	2.6	10	J	µg/L	1	6/21/2016 4:08:44 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 4:08:44 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 11:13:00 AM

Lab ID: 1606621-007

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.5	2.0	10	J	µg/L	1	6/21/2016 4:08:44 AM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 4:08:44 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 4:08:44 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 4:08:44 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 4:08:44 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 4:08:44 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 4:08:44 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 4:08:44 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 4:08:44 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 4:08:44 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 4:08:44 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862

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	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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 11:13:00 AM

Lab ID: 1606621-007

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 4:08:44 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 4:08:44 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 4:08:44 AM	25862
Surr: 2-Fluorophenol	57.2	0	15-123		%Rec	1	6/21/2016 4:08:44 AM	25862
Surr: Phenol-d5	41.5	0	4.13-124		%Rec	1	6/21/2016 4:08:44 AM	25862
Surr: 2,4,6-Tribromophenol	83.0	0	18.4-134		%Rec	1	6/21/2016 4:08:44 AM	25862
Surr: Nitrobenzene-d5	79.4	0	28.8-134		%Rec	1	6/21/2016 4:08:44 AM	25862
Surr: 2-Fluorobiphenyl	75.2	0	35.9-125		%Rec	1	6/21/2016 4:08:44 AM	25862
Surr: 4-Terphenyl-d14	93.6	0	15-146		%Rec	1	6/21/2016 4:08:44 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Toluene	ND	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Methyl tert-butyl ether (MTBE)	3.6	0.21	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2-Dichloroethane (EDC)	6.0	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Naphthalene	ND	0.093	2.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Acetone	ND	4.9	10		µg/L	1	6/20/2016 7:09:00 PM	R35014
Bromobenzene	ND	0.098	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Bromoform	ND	0.10	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Bromomethane	ND	0.78	3.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
2-Butanone	ND	0.74	10		µg/L	1	6/20/2016 7:09:00 PM	R35014
Carbon disulfide	ND	0.60	10		µg/L	1	6/20/2016 7:09:00 PM	R35014
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Chloroethane	ND	0.19	2.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Chloroform	ND	0.089	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Chloromethane	ND	0.21	3.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
cis-1,2-DCE	12	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014

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	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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 11:13:00 AM

Lab ID: 1606621-007

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Dibromomethane	ND	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,1-Dichloroethane	130	1.1	10		µg/L	10	6/21/2016 4:11:00 PM	R35071
1,1-Dichloroethene	10	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
2-Hexanone	ND	0.84	10		µg/L	1	6/20/2016 7:09:00 PM	R35014
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/20/2016 7:09:00 PM	R35014
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Styrene	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Tetrachloroethene (PCE)	0.77	0.15	1.0	J	µg/L	1	6/20/2016 7:09:00 PM	R35014
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,1,1-Trichloroethane	4.1	0.091	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,1,2-Trichloroethane	1.2	0.13	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Trichloroethene (TCE)	8.8	0.18	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/20/2016 7:09:00 PM	R35014
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/20/2016 7:09:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-30

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 11:13:00 AM

Lab ID: 1606621-007

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	93.7	0	70-130		%Rec	1	6/20/2016 7:09:00 PM	R35014
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	1	6/20/2016 7:09:00 PM	R35014
Surr: Dibromofluoromethane	99.5	0	70-130		%Rec	1	6/20/2016 7:09:00 PM	R35014
Surr: Toluene-d8	96.0	0	70-130		%Rec	1	6/20/2016 7:09:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 10:52:00 AM

Lab ID: 1606621-008

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 6:03:23 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/13/2016 11:30:59 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 11:30:59 PM	25809
Surr: DNOP	114	0	70-141		%Rec	1	6/13/2016 11:30:59 PM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	6/16/2016 2:51:51 PM	B34963
Surr: BFB	111	0	66.4-120		%Rec	1	6/16/2016 2:51:51 PM	B34963
EPA METHOD 300.0: ANIONS								
Analyst: LGT								
Fluoride	1.1	0.023	0.10		mg/L	1	6/14/2016 12:22:51 AM	R34886
Chloride	82	0.55	10		mg/L	20	6/14/2016 12:35:16 AM	R34886
Bromide	0.40	0.032	0.10		mg/L	1	6/14/2016 12:22:51 AM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50		mg/L	1	6/14/2016 12:22:51 AM	R34886
Sulfate	650	1.3	10		mg/L	20	6/14/2016 12:35:16 AM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 1:49:45 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.028	0.0013	0.0020		mg/L	1	6/24/2016 3:15:02 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:15:02 PM	D35153
Calcium	66	0.26	1.0		mg/L	1	6/24/2016 3:15:02 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 3:15:02 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:15:02 PM	D35153
Iron	0.022	0.0091	0.020		mg/L	1	6/24/2016 3:15:02 PM	D35153
Magnesium	9.5	0.013	1.0		mg/L	1	6/24/2016 3:15:02 PM	D35153
Manganese	0.39	0.00032	0.0020	*	mg/L	1	6/24/2016 3:15:02 PM	D35153
Potassium	0.49	0.18	1.0	J	mg/L	1	6/24/2016 3:15:02 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:15:02 PM	D35153
Sodium	530	0.96	10		mg/L	10	6/28/2016 4:43:43 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 3:15:02 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	0.076	0.0011	0.0020		mg/L	1	6/20/2016 6:57:30 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 6:57:30 PM	25917
Chromium	ND	0.0022	0.0060		mg/L	1	6/20/2016 6:57:30 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 6:57:30 PM	25917
Iron	1.5	0.036	0.10	*	mg/L	5	6/20/2016 6:59:10 PM	25917
Manganese	0.44	0.0015	0.0020	*	mg/L	1	6/24/2016 4:43:17 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 6:57:30 PM	25917
Zinc	0.013	0.0039	0.010		mg/L	1	6/24/2016 4:43:17 PM	25917

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 10:52:00 AM

Lab ID: 1606621-008

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS								Analyst: JLF
Arsenic	0.0021	0.00014	0.0010		mg/L	1	7/1/2016 6:27:34 PM	C35415
Lead	ND	0.00017	0.00050		mg/L	1	7/1/2016 6:27:34 PM	C35415
Selenium	0.0039	0.00021	0.0010		mg/L	1	7/1/2016 6:27:34 PM	C35415
Uranium	0.013	0.000051	0.00050		mg/L	1	7/1/2016 6:27:34 PM	C35415
200.8 ICPMS METALS:TOTAL								Analyst: JLF
Arsenic	0.0013	0.00029	0.0010		mg/L	1	6/21/2016 7:41:48 PM	25917
Lead	0.00094	0.000047	0.00050		mg/L	1	6/21/2016 7:41:48 PM	25917
Selenium	0.0017	0.00062	0.0050	J	mg/L	5	6/27/2016 8:09:16 PM	25917
Uranium	0.012	0.0000049	0.00050		mg/L	1	6/21/2016 7:41:48 PM	25917
EPA METHOD 245.1: MERCURY								Analyst: pmf
Mercury	0.000076	0.000053	0.00020	J	mg/L	1	6/24/2016 10:47:34 AM	26032
EPA METHOD 8270C: SEMIVOLATILES								Analyst: JDC
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 4:37:01 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Bis(2-ethylhexyl)phthalate	4.2	2.6	10	J	µg/L	1	6/21/2016 4:37:01 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 4:37:01 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 10:52:00 AM

Lab ID: 1606621-008

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	4.9	2.0	10	J	µg/L	1	6/21/2016 4:37:01 AM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 4:37:01 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 4:37:01 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 4:37:01 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 4:37:01 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 4:37:01 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 4:37:01 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 4:37:01 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 4:37:01 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 4:37:01 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 4:37:01 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 10:52:00 AM

Lab ID: 1606621-008

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 4:37:01 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 4:37:01 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 4:37:01 AM	25862
Surr: 2-Fluorophenol	76.0	0	15-123		%Rec	1	6/21/2016 4:37:01 AM	25862
Surr: Phenol-d5	59.2	0	4.13-124		%Rec	1	6/21/2016 4:37:01 AM	25862
Surr: 2,4,6-Tribromophenol	107	0	18.4-134		%Rec	1	6/21/2016 4:37:01 AM	25862
Surr: Nitrobenzene-d5	99.2	0	28.8-134		%Rec	1	6/21/2016 4:37:01 AM	25862
Surr: 2-Fluorobiphenyl	91.2	0	35.9-125		%Rec	1	6/21/2016 4:37:01 AM	25862
Surr: 4-Terphenyl-d14	102	0	15-146		%Rec	1	6/21/2016 4:37:01 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Toluene	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Methyl tert-butyl ether (MTBE)	8.8	0.21	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Naphthalene	ND	0.093	2.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Acetone	ND	4.9	10		µg/L	1	6/20/2016 7:33:00 PM	R35014
Bromobenzene	ND	0.098	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Bromoform	ND	0.10	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Bromomethane	ND	0.78	3.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
2-Butanone	ND	0.74	10		µg/L	1	6/20/2016 7:33:00 PM	R35014
Carbon disulfide	ND	0.60	10		µg/L	1	6/20/2016 7:33:00 PM	R35014
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Chloroethane	ND	0.19	2.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Chloroform	ND	0.089	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Chloromethane	ND	0.21	3.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 10:52:00 AM

Lab ID: 1606621-008

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Dibromomethane	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
2-Hexanone	ND	0.84	10		µg/L	1	6/20/2016 7:33:00 PM	R35014
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/20/2016 7:33:00 PM	R35014
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Styrene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/20/2016 7:33:00 PM	R35014
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/20/2016 7:33:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-29

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 10:52:00 AM

Lab ID: 1606621-008

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	93.6	0	70-130		%Rec	1	6/20/2016 7:33:00 PM	R35014
Surr: 4-Bromofluorobenzene	100	0	70-130		%Rec	1	6/20/2016 7:33:00 PM	R35014
Surr: Dibromofluoromethane	97.5	0	70-130		%Rec	1	6/20/2016 7:33:00 PM	R35014
Surr: Toluene-d8	97.2	0	70-130		%Rec	1	6/20/2016 7:33:00 PM	R35014

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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.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 1:42:00 PM

Lab ID: 1606621-009

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 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	6/13/2016 11:52:55 PM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/13/2016 11:52:55 PM	25809
Surr: DNOP	118	0	70-141		%Rec	1	6/13/2016 11:52:55 PM	25809
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	6/16/2016 3:15:21 PM	B34963
Surr: BFB	110	0	66.4-120		%Rec	1	6/16/2016 3:15:21 PM	B34963
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	0.29	0.023	0.10		mg/L	1	6/13/2016 9:53:57 PM	R34886
Chloride	610	1.4	25		mg/L	50	6/30/2016 3:33:04 AM	B35338
Bromide	0.64	0.032	0.10		mg/L	1	6/13/2016 9:53:57 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 9:53:57 PM	R34886
Sulfate	96	1.3	10		mg/L	20	6/13/2016 10:06:21 PM	R34886
Nitrate+Nitrite as N	3.6	0.42	1.0		mg/L	5	6/14/2016 2:02:09 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.11	0.0013	0.0020		mg/L	1	6/24/2016 3:19:04 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:19:04 PM	D35153
Calcium	35	0.26	1.0		mg/L	1	6/24/2016 3:19:04 PM	D35153
Chromium	0.011	0.0018	0.0060		mg/L	1	6/24/2016 3:19:04 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:19:04 PM	D35153
Iron	0.045	0.0091	0.020		mg/L	1	6/24/2016 3:19:04 PM	D35153
Magnesium	1.3	0.013	1.0		mg/L	1	6/24/2016 3:19:04 PM	D35153
Manganese	0.0031	0.00032	0.0020		mg/L	1	6/24/2016 3:19:04 PM	D35153
Potassium	2.1	0.18	1.0		mg/L	1	6/24/2016 3:19:04 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:19:04 PM	D35153
Sodium	660	0.96	10		mg/L	10	6/28/2016 4:45:42 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 3:19:04 PM	D35153
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.25	0.0011	0.0020		mg/L	1	6/20/2016 7:01:04 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 7:01:04 PM	25917
Chromium	0.016	0.0022	0.0060		mg/L	1	6/24/2016 4:51:05 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 7:01:04 PM	25917
Iron	7.1	0.072	0.20	*	mg/L	10	6/24/2016 4:52:55 PM	25917
Manganese	0.28	0.0015	0.0020	*	mg/L	1	6/24/2016 4:51:05 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 7:01:04 PM	25917
Zinc	0.030	0.0039	0.010		mg/L	1	6/24/2016 4:51:05 PM	25917
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0049	0.0014	0.010	J	mg/L	10	7/1/2016 6:42:55 PM	C35415

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 1:42:00 PM

Lab ID: 1606621-009

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Lead	0.00019	0.00017	0.00050	J	mg/L	1	7/1/2016 6:39:51 PM	C35415
Selenium	0.016	0.00021	0.0010		mg/L	1	7/1/2016 6:39:51 PM	C35415
Uranium	0.17	0.00051	0.0050	*	mg/L	10	7/1/2016 6:42:55 PM	C35415
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0045	0.0015	0.0050	J	mg/L	5	6/27/2016 8:12:17 PM	25917
Lead	0.0092	0.000047	0.00050		mg/L	1	6/21/2016 7:44:48 PM	25917
Selenium	0.013	0.0025	0.020	J	mg/L	20	6/27/2016 8:15:17 PM	25917
Uranium	0.17	0.000099	0.010	*	mg/L	20	6/27/2016 8:15:17 PM	25917
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000089	0.000053	0.00020	J	mg/L	1	6/24/2016 10:49:36 AM	26032
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 5:05:14 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Bis(2-ethylhexyl)phthalate	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Di-n-octyl phthalate	5.1	2.0	10	J	µg/L	1	6/21/2016 5:05:14 AM	25862

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
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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 1:42:00 PM

Lab ID: 1606621-009

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 5:05:14 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 5:05:14 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 5:05:14 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 5:05:14 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 5:05:14 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 5:05:14 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 5:05:14 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 5:05:14 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Phenol	ND	2.0	10		µg/L	1	6/21/2016 5:05:14 AM	25862

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
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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 1:42:00 PM

Lab ID: 1606621-009

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 5:05:14 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 5:05:14 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 5:05:14 AM	25862
Surr: 2-Fluorophenol	62.1	0	15-123		%Rec	1	6/21/2016 5:05:14 AM	25862
Surr: Phenol-d5	47.3	0	4.13-124		%Rec	1	6/21/2016 5:05:14 AM	25862
Surr: 2,4,6-Tribromophenol	88.1	0	18.4-134		%Rec	1	6/21/2016 5:05:14 AM	25862
Surr: Nitrobenzene-d5	87.6	0	28.8-134		%Rec	1	6/21/2016 5:05:14 AM	25862
Surr: 2-Fluorobiphenyl	73.0	0	35.9-125		%Rec	1	6/21/2016 5:05:14 AM	25862
Surr: 4-Terphenyl-d14	99.1	0	15-146		%Rec	1	6/21/2016 5:05:14 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Toluene	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Naphthalene	ND	0.093	2.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Acetone	ND	4.9	10		µg/L	1	6/20/2016 7:56:00 PM	R35014
Bromobenzene	ND	0.098	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Bromoform	ND	0.10	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Bromomethane	ND	0.78	3.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
2-Butanone	ND	0.74	10		µg/L	1	6/20/2016 7:56:00 PM	R35014
Carbon disulfide	ND	0.60	10		µg/L	1	6/20/2016 7:56:00 PM	R35014
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Chloroethane	ND	0.19	2.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Chloroform	ND	0.089	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Chloromethane	ND	0.21	3.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 1:42:00 PM

Lab ID: 1606621-009

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Dibromomethane	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
2-Hexanone	ND	0.84	10		µg/L	1	6/20/2016 7:56:00 PM	R35014
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/20/2016 7:56:00 PM	R35014
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Styrene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/20/2016 7:56:00 PM	R35014
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/20/2016 7:56:00 PM	R35014
Surr: 1,2-Dichloroethane-d4	96.3	0	70-130		%Rec	1	6/20/2016 7:56:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-44

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 1:42:00 PM

Lab ID: 1606621-009

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	1	6/20/2016 7:56:00 PM	R35014
Surr: Dibromofluoromethane	101	0	70-130		%Rec	1	6/20/2016 7:56:00 PM	R35014
Surr: Toluene-d8	98.6	0	70-130		%Rec	1	6/20/2016 7:56:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-010

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 6:18:43 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/14/2016 12:14:43 AM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/14/2016 12:14:43 AM	25809
Surr: DNOP	116	0	70-141		%Rec	1	6/14/2016 12:14:43 AM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Gasoline Range Organics (GRO)	0.81	0.025	0.050		mg/L	1	6/16/2016 3:38:52 PM	B34963
Surr: BFB	115	0	66.4-120		%Rec	1	6/16/2016 3:38:52 PM	B34963
EPA METHOD 300.0: ANIONS								
Fluoride	0.28	0.023	0.10		mg/L	1	6/13/2016 10:18:46 PM	R34886
Chloride	520	1.4	25		mg/L	50	6/30/2016 3:45:28 AM	B35338
Bromide	1.4	0.032	0.10		mg/L	1	6/13/2016 10:18:46 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 10:18:46 PM	R34886
Sulfate	100	1.3	10		mg/L	20	6/13/2016 10:31:10 PM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 2:51:48 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Barium	0.064	0.0013	0.0020		mg/L	1	6/24/2016 3:23:03 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:23:03 PM	D35153
Calcium	32	0.26	1.0		mg/L	1	6/24/2016 3:23:03 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 3:23:03 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:23:03 PM	D35153
Iron	0.099	0.0091	0.020		mg/L	1	6/24/2016 3:23:03 PM	D35153
Magnesium	6.5	0.013	1.0		mg/L	1	6/24/2016 3:23:03 PM	D35153
Manganese	0.082	0.00032	0.0020	*	mg/L	1	6/24/2016 3:23:03 PM	D35153
Potassium	0.91	0.18	1.0	J	mg/L	1	6/24/2016 3:23:03 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:23:03 PM	D35153
Sodium	670	0.96	10		mg/L	10	6/28/2016 4:47:30 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 3:23:03 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Barium	0.35	0.0011	0.0020		mg/L	1	6/20/2016 7:04:44 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 7:04:44 PM	25917
Chromium	0.0072	0.0022	0.0060		mg/L	1	6/24/2016 4:54:49 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 7:04:44 PM	25917
Iron	7.0	0.072	0.20	*	mg/L	10	6/24/2016 4:56:46 PM	25917
Manganese	0.40	0.0015	0.0020	*	mg/L	1	6/24/2016 4:54:49 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 7:04:44 PM	25917
Zinc	0.036	0.0039	0.010		mg/L	1	6/24/2016 4:54:49 PM	25917

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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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-010

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS								Analyst: JLF
Arsenic	0.0057	0.00014	0.0010		mg/L	1	7/1/2016 6:45:58 PM	C35415
Lead	0.00057	0.00017	0.00050		mg/L	1	7/1/2016 6:45:58 PM	C35415
Selenium	0.012	0.0011	0.0050		mg/L	5	7/1/2016 6:49:02 PM	C35415
Uranium	0.064	0.00026	0.0025	*	mg/L	5	7/1/2016 6:49:02 PM	C35415
200.8 ICPMS METALS:TOTAL								Analyst: JLF
Arsenic	0.0042	0.00029	0.0010		mg/L	1	6/21/2016 7:53:53 PM	25917
Lead	0.010	0.000047	0.00050		mg/L	1	6/21/2016 7:53:53 PM	25917
Selenium	0.0072	0.0012	0.010	J	mg/L	10	6/28/2016 6:54:13 PM	25917
Uranium	0.066	0.000025	0.0025	*	mg/L	5	6/27/2016 8:18:18 PM	25917
EPA METHOD 245.1: MERCURY								Analyst: pmf
Mercury	0.00012	0.000053	0.00020	J	mg/L	1	6/24/2016 10:51:39 AM	26032
EPA METHOD 8270C: SEMIVOLATILES								Analyst: JDC
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 5:33:24 AM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Bis(2-ethylhexyl)phthalate	5.6	2.6	10	J	µg/L	1	6/21/2016 5:33:24 AM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 5:33:24 AM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-010

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	5.4	2.0	10	J	µg/L	1	6/21/2016 5:33:24 AM	25862
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 5:33:24 AM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Dimethyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 5:33:24 AM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 5:33:24 AM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 5:33:24 AM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 5:33:24 AM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 5:33:24 AM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 5:33:24 AM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 5:33:24 AM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 5:33:24 AM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 5:33:24 AM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-010

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	2.0	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 5:33:24 AM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 5:33:24 AM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 5:33:24 AM	25862
Surr: 2-Fluorophenol	53.4	0	15-123		%Rec	1	6/21/2016 5:33:24 AM	25862
Surr: Phenol-d5	44.5	0	4.13-124		%Rec	1	6/21/2016 5:33:24 AM	25862
Surr: 2,4,6-Tribromophenol	89.0	0	18.4-134		%Rec	1	6/21/2016 5:33:24 AM	25862
Surr: Nitrobenzene-d5	71.6	0	28.8-134		%Rec	1	6/21/2016 5:33:24 AM	25862
Surr: 2-Fluorobiphenyl	64.0	0	35.9-125		%Rec	1	6/21/2016 5:33:24 AM	25862
Surr: 4-Terphenyl-d14	88.4	0	15-146		%Rec	1	6/21/2016 5:33:24 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	0.81	0.19	2.0	J	µg/L	2	6/20/2016 8:20:00 PM	R35014
Toluene	ND	0.24	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Ethylbenzene	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Methyl tert-butyl ether (MTBE)	640	4.2	20		µg/L	20	6/21/2016 3:23:00 PM	R35071
1,2,4-Trimethylbenzene	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,3,5-Trimethylbenzene	ND	0.23	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2-Dichloroethane (EDC)	26	0.23	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2-Dibromoethane (EDB)	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Naphthalene	ND	0.19	4.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1-Methylnaphthalene	ND	0.41	8.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
2-Methylnaphthalene	ND	0.32	8.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Acetone	ND	9.8	20		µg/L	2	6/20/2016 8:20:00 PM	R35014
Bromobenzene	ND	0.20	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Bromodichloromethane	ND	0.28	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Bromoform	ND	0.20	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Bromomethane	ND	1.6	6.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
2-Butanone	ND	1.5	20		µg/L	2	6/20/2016 8:20:00 PM	R35014
Carbon disulfide	ND	1.2	20		µg/L	2	6/20/2016 8:20:00 PM	R35014
Carbon Tetrachloride	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Chlorobenzene	ND	0.23	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Chloroethane	ND	0.38	4.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Chloroform	ND	0.18	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Chloromethane	ND	0.43	6.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
2-Chlorotoluene	ND	0.80	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
4-Chlorotoluene	ND	0.26	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
cis-1,2-DCE	2.1	0.25	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-010

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.21	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2-Dibromo-3-chloropropane	ND	0.47	4.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Dibromochloromethane	ND	0.17	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Dibromomethane	ND	0.24	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2-Dichlorobenzene	ND	0.80	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,3-Dichlorobenzene	ND	0.29	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,4-Dichlorobenzene	ND	0.29	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Dichlorodifluoromethane	ND	0.71	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1-Dichloroethane	23	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1-Dichloroethene	46	0.21	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2-Dichloropropane	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,3-Dichloropropane	ND	0.31	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
2,2-Dichloropropane	ND	0.33	4.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1-Dichloropropene	ND	0.27	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Hexachlorobutadiene	ND	0.40	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
2-Hexanone	ND	1.7	20		µg/L	2	6/20/2016 8:20:00 PM	R35014
Isopropylbenzene	0.54	0.21	2.0	J	µg/L	2	6/20/2016 8:20:00 PM	R35014
4-Isopropyltoluene	ND	0.28	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
4-Methyl-2-pentanone	ND	0.86	20		µg/L	2	6/20/2016 8:20:00 PM	R35014
Methylene Chloride	ND	0.37	6.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
n-Butylbenzene	ND	0.32	6.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
n-Propylbenzene	ND	0.26	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
sec-Butylbenzene	1.0	0.25	2.0	J	µg/L	2	6/20/2016 8:20:00 PM	R35014
Styrene	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
tert-Butylbenzene	ND	0.23	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1,1,2-Tetrachloroethane	ND	0.22	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1,2,2-Tetrachloroethane	ND	0.26	4.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Tetrachloroethene (PCE)	ND	0.30	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
trans-1,2-DCE	ND	0.80	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
trans-1,3-Dichloropropene	ND	0.21	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2,3-Trichlorobenzene	ND	0.23	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2,4-Trichlorobenzene	ND	0.27	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1,1-Trichloroethane	1.2	0.18	2.0	J	µg/L	2	6/20/2016 8:20:00 PM	R35014
1,1,2-Trichloroethane	1.9	0.25	2.0	J	µg/L	2	6/20/2016 8:20:00 PM	R35014
Trichloroethene (TCE)	ND	0.35	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Trichlorofluoromethane	ND	0.41	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
1,2,3-Trichloropropane	ND	0.40	4.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Vinyl chloride	ND	0.39	2.0		µg/L	2	6/20/2016 8:20:00 PM	R35014
Xylenes, Total	ND	0.73	3.0		µg/L	2	6/20/2016 8:20:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-32

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-010

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	94.1	0	70-130		%Rec	2	6/20/2016 8:20:00 PM	R35014
Surr: 4-Bromofluorobenzene	102	0	70-130		%Rec	2	6/20/2016 8:20:00 PM	R35014
Surr: Dibromofluoromethane	101	0	70-130		%Rec	2	6/20/2016 8:20:00 PM	R35014
Surr: Toluene-d8	97.5	0	70-130		%Rec	2	6/20/2016 8:20:00 PM	R35014

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:06:00 PM

Lab ID: 1606621-011

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
1,2-Dibromoethane	ND	0.0033	0.010		µg/L	1	6/15/2016 6:49:19 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Diesel Range Organics (DRO)	ND	0.69	1.0		mg/L	1	6/14/2016 12:36:53 AM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/14/2016 12:36:53 AM	25809
Surr: DNOP	115	0	70-141		%Rec	1	6/14/2016 12:36:53 AM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	6/16/2016 4:02:24 PM	B34963
Surr: BFB	112	0	66.4-120		%Rec	1	6/16/2016 4:02:24 PM	B34963
EPA METHOD 300.0: ANIONS								
Fluoride	0.51	0.023	0.10		mg/L	1	6/13/2016 10:43:35 PM	R34886
Chloride	750	2.8	50		mg/L	100	6/30/2016 4:22:43 AM	B35338
Bromide	2.4	0.032	0.10		mg/L	1	6/13/2016 10:43:35 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	0.22	0.50	H	mg/L	1	6/13/2016 10:43:35 PM	R34886
Sulfate	71	1.3	10		mg/L	20	6/13/2016 10:55:59 PM	R34886
Nitrate+Nitrite as N	5.6	0.42	1.0		mg/L	5	6/14/2016 3:04:13 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Barium	0.071	0.0013	0.0020		mg/L	1	6/24/2016 3:27:05 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:27:05 PM	D35153
Calcium	14	0.26	1.0		mg/L	1	6/24/2016 3:27:05 PM	D35153
Chromium	0.0027	0.0018	0.0060	J	mg/L	1	6/24/2016 3:27:05 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:27:05 PM	D35153
Iron	0.19	0.0091	0.020		mg/L	1	6/24/2016 3:27:05 PM	D35153
Magnesium	2.0	0.013	1.0		mg/L	1	6/24/2016 3:27:05 PM	D35153
Manganese	0.019	0.00032	0.0020		mg/L	1	6/24/2016 3:27:05 PM	D35153
Potassium	2.1	0.18	1.0		mg/L	1	6/24/2016 3:27:05 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:27:05 PM	D35153
Sodium	640	0.96	10		mg/L	10	6/28/2016 4:49:29 PM	A35265
Zinc	0.0029	0.0028	0.010	J	mg/L	1	6/24/2016 3:27:05 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Barium	0.25	0.0011	0.0020		mg/L	1	6/20/2016 7:08:20 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 7:08:20 PM	25917
Chromium	0.0043	0.0022	0.0060	J	mg/L	1	6/24/2016 4:58:45 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 7:08:20 PM	25917
Iron	7.3	0.072	0.20	*	mg/L	10	6/24/2016 5:00:40 PM	25917
Manganese	0.30	0.0015	0.0020	*	mg/L	1	6/24/2016 4:58:45 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 7:08:20 PM	25917
Zinc	0.029	0.0039	0.010		mg/L	1	6/24/2016 4:58:45 PM	25917

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:06:00 PM

Lab ID: 1606621-011

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0075	0.0028	0.020	J	mg/L	20	7/6/2016 7:20:06 PM	B35457
Lead	0.00091	0.00017	0.00050		mg/L	1	7/1/2016 6:52:05 PM	C35415
Selenium	0.060	0.0021	0.010	*	mg/L	10	7/1/2016 6:55:09 PM	C35415
Uranium	0.023	0.000051	0.00050		mg/L	1	7/1/2016 6:52:05 PM	C35415
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0067	0.0029	0.010	J	mg/L	10	6/27/2016 8:21:18 PM	25917
Lead	0.010	0.000047	0.00050		mg/L	1	6/21/2016 7:56:54 PM	25917
Selenium	0.046	0.012	0.10	J	mg/L	100	6/28/2016 6:57:13 PM	25917
Uranium	0.021	0.0000049	0.00050		mg/L	1	6/21/2016 7:56:54 PM	25917
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000094	0.000053	0.00020	J	mg/L	1	6/24/2016 10:53:40 AM	26032
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Acenaphthylene	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Aniline	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Anthracene	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Azobenzene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benz(a)anthracene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benzo(a)pyrene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benzo(b)fluoranthene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benzo(g,h,i)perylene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benzo(k)fluoranthene	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benzoic acid	ND	13	100	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Benzyl alcohol	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Bis(2-chloroethoxy)methane	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Bis(2-chloroethyl)ether	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Bis(2-chloroisopropyl)ether	ND	9.5	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Bis(2-ethylhexyl)phthalate	24	13	50	JD	µg/L	1	6/21/2016 6:01:24 AM	25862
4-Bromophenyl phenyl ether	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Butyl benzyl phthalate	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Carbazole	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
4-Chloro-3-methylphenol	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
4-Chloroaniline	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2-Chloronaphthalene	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2-Chlorophenol	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
4-Chlorophenyl phenyl ether	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Chrysene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Di-n-butyl phthalate	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:06:00 PM

Lab ID: 1606621-011

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	28	9.9	50	JD	µg/L	1	6/21/2016 6:01:24 AM	25862
Dibenz(a,h)anthracene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Dibenzofuran	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
1,2-Dichlorobenzene	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
1,3-Dichlorobenzene	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
1,4-Dichlorobenzene	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
3,3'-Dichlorobenzidine	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Diethyl phthalate	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Dimethyl phthalate	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,4-Dichlorophenol	ND	12	100	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,4-Dimethylphenol	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
4,6-Dinitro-2-methylphenol	ND	9.0	100	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,4-Dinitrophenol	ND	14	100	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,4-Dinitrotoluene	ND	16	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,6-Dinitrotoluene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Fluoranthene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Fluorene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Hexachlorobenzene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Hexachlorobutadiene	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Hexachlorocyclopentadiene	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Hexachloroethane	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Indeno(1,2,3-cd)pyrene	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Isophorone	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
1-Methylnaphthalene	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2-Methylnaphthalene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2-Methylphenol	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
3+4-Methylphenol	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
N-Nitrosodi-n-propylamine	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
N-Nitrosodimethylamine	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
N-Nitrosodiphenylamine	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Naphthalene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2-Nitroaniline	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
3-Nitroaniline	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
4-Nitroaniline	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Nitrobenzene	ND	14	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2-Nitrophenol	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
4-Nitrophenol	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Pentachlorophenol	ND	12	100	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Phenanthrene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:06:00 PM

Lab ID: 1606621-011

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	9.9	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Pyrene	ND	15	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Pyridine	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
1,2,4-Trichlorobenzene	ND	13	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,4,5-Trichlorophenol	ND	11	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
2,4,6-Trichlorophenol	ND	12	50	D	µg/L	1	6/21/2016 6:01:24 AM	25862
Surr: 2-Fluorophenol	63.9	0	15-123	D	%Rec	1	6/21/2016 6:01:24 AM	25862
Surr: Phenol-d5	51.9	0	4.13-124	D	%Rec	1	6/21/2016 6:01:24 AM	25862
Surr: 2,4,6-Tribromophenol	107	0	18.4-134	D	%Rec	1	6/21/2016 6:01:24 AM	25862
Surr: Nitrobenzene-d5	88.6	0	28.8-134	D	%Rec	1	6/21/2016 6:01:24 AM	25862
Surr: 2-Fluorobiphenyl	83.6	0	35.9-125	D	%Rec	1	6/21/2016 6:01:24 AM	25862
Surr: 4-Terphenyl-d14	115	0	15-146	D	%Rec	1	6/21/2016 6:01:24 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Toluene	ND	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Methyl tert-butyl ether (MTBE)	3.0	0.21	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2-Dichloroethane (EDC)	2.2	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Naphthalene	ND	0.093	2.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Acetone	ND	4.9	10		µg/L	1	6/21/2016 3:47:00 PM	R35071
Bromobenzene	ND	0.098	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Bromoform	ND	0.10	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Bromomethane	ND	0.78	3.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
2-Butanone	ND	0.74	10		µg/L	1	6/21/2016 3:47:00 PM	R35071
Carbon disulfide	ND	0.60	10		µg/L	1	6/21/2016 3:47:00 PM	R35071
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Chloroethane	ND	0.19	2.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Chloroform	ND	0.089	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Chloromethane	ND	0.21	3.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:06:00 PM

Lab ID: 1606621-011

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Dibromomethane	ND	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1-Dichloroethane	2.7	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1-Dichloroethene	3.4	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
2-Hexanone	ND	0.84	10		µg/L	1	6/21/2016 3:47:00 PM	R35071
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/21/2016 3:47:00 PM	R35071
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Styrene	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,1,2-Trichloroethane	0.54	0.13	1.0	J	µg/L	1	6/21/2016 3:47:00 PM	R35071
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/21/2016 3:47:00 PM	R35071
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/21/2016 3:47:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-41

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:06:00 PM

Lab ID: 1606621-011

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	89.5	0	70-130		%Rec	1	6/21/2016 3:47:00 PM	R35071
Surr: 4-Bromofluorobenzene	103	0	70-130		%Rec	1	6/21/2016 3:47:00 PM	R35071
Surr: Dibromofluoromethane	91.5	0	70-130		%Rec	1	6/21/2016 3:47:00 PM	R35071
Surr: Toluene-d8	99.4	0	70-130		%Rec	1	6/21/2016 3:47:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:46:00 PM

Lab ID: 1606621-012

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8011/504.1: EDB								
Analyst: JME								
1,2-Dibromoethane	0.12	0.0033	0.010		µg/L	1	6/15/2016 7:04:36 PM	25858
EPA METHOD 8015M/D: DIESEL RANGE								
Analyst: TOM								
Diesel Range Organics (DRO)	60	0.69	1.0		mg/L	1	6/14/2016 12:58:41 AM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/14/2016 12:58:41 AM	25809
Surr: DNOP	121	0	70-141		%Rec	1	6/14/2016 12:58:41 AM	25809
EPA METHOD 8015D: GASOLINE RANGE								
Analyst: NSB								
Gasoline Range Organics (GRO)	0.16	0.025	0.050		mg/L	1	6/16/2016 4:25:54 PM	B34963
Surr: BFB	132	0	66.4-120	S	%Rec	1	6/16/2016 4:25:54 PM	B34963
EPA METHOD 300.0: ANIONS								
Analyst: LGT								
Fluoride	0.68	0.11	0.50		mg/L	5	6/13/2016 11:08:24 PM	R34886
Chloride	890	2.8	50		mg/L	100	6/30/2016 3:20:40 AM	B35338
Bromide	3.0	0.16	0.50		mg/L	5	6/13/2016 11:08:24 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	1.1	2.5	H	mg/L	5	6/13/2016 11:08:24 PM	R34886
Sulfate	130	0.32	2.5		mg/L	5	6/13/2016 11:08:24 PM	R34886
Nitrate+Nitrite as N	ND	0.42	1.0		mg/L	5	6/14/2016 3:16:38 AM	R34886
EPA METHOD 200.7: DISSOLVED METALS								
Analyst: ELS								
Barium	0.079	0.0013	0.0020		mg/L	1	6/24/2016 3:36:43 PM	D35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:36:43 PM	D35153
Calcium	19	0.26	1.0		mg/L	1	6/24/2016 3:36:43 PM	D35153
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 3:36:43 PM	D35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:36:43 PM	D35153
Iron	0.077	0.0091	0.020		mg/L	1	6/24/2016 3:36:43 PM	D35153
Magnesium	2.5	0.013	1.0		mg/L	1	6/24/2016 3:36:43 PM	D35153
Manganese	0.37	0.00032	0.0020	*	mg/L	1	6/24/2016 3:36:43 PM	D35153
Potassium	1.7	0.18	1.0		mg/L	1	6/24/2016 3:36:43 PM	D35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:36:43 PM	D35153
Sodium	690	0.96	10		mg/L	10	6/28/2016 4:51:23 PM	A35265
Zinc	ND	0.0028	0.010		mg/L	1	6/24/2016 3:36:43 PM	D35153
EPA METHOD 200.7: TOTAL METALS								
Analyst: ELS								
Barium	0.12	0.0011	0.0020		mg/L	1	6/20/2016 7:20:12 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/20/2016 7:20:12 PM	25917
Chromium	ND	0.0022	0.0060		mg/L	1	6/20/2016 7:20:12 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/20/2016 7:20:12 PM	25917
Iron	1.6	0.036	0.10	*	mg/L	5	6/20/2016 7:21:50 PM	25917
Manganese	0.43	0.0015	0.0020	*	mg/L	1	6/24/2016 5:02:36 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/20/2016 7:20:12 PM	25917
Zinc	0.013	0.0039	0.010		mg/L	1	6/24/2016 5:02:36 PM	25917

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	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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:46:00 PM

Lab ID: 1606621-012

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.0060	0.0014	0.010	J	mg/L	10	7/1/2016 7:01:15 PM	C35415
Lead	0.00031	0.00017	0.00050	J	mg/L	1	7/1/2016 6:58:12 PM	C35415
Selenium	0.016	0.0021	0.010		mg/L	10	7/1/2016 7:01:15 PM	C35415
Uranium	0.021	0.000051	0.00050		mg/L	1	7/1/2016 6:58:12 PM	C35415
200.8 ICPMS METALS:TOTAL							Analyst: JLF	
Arsenic	0.0038	0.0029	0.010	J	mg/L	10	6/27/2016 8:30:24 PM	25917
Lead	0.0032	0.000047	0.00050		mg/L	1	6/21/2016 7:59:55 PM	25917
Selenium	0.0086	0.0012	0.010	J	mg/L	10	6/27/2016 8:30:24 PM	25917
Uranium	0.021	0.0000049	0.00050		mg/L	1	6/21/2016 7:59:55 PM	25917
EPA METHOD 245.1: MERCURY							Analyst: pmf	
Mercury	0.000097	0.000053	0.00020	J	mg/L	1	6/24/2016 10:55:42 AM	26032
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Acenaphthene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Acenaphthylene	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Aniline	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Anthracene	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Azobenzene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benz(a)anthracene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benzo(a)pyrene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benzo(b)fluoranthene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benzo(g,h,i)perylene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benzo(k)fluoranthene	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benzoic acid	ND	13	100	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Benzyl alcohol	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Bis(2-chloroethoxy)methane	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Bis(2-chloroethyl)ether	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Bis(2-chloroisopropyl)ether	ND	9.5	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Bis(2-ethylhexyl)phthalate	21	13	50	JD	µg/L	1	6/21/2016 6:28:29 AM	25862
4-Bromophenyl phenyl ether	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Butyl benzyl phthalate	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Carbazole	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
4-Chloro-3-methylphenol	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
4-Chloroaniline	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2-Chloronaphthalene	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2-Chlorophenol	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
4-Chlorophenyl phenyl ether	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Chrysene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Di-n-butyl phthalate	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:46:00 PM

Lab ID: 1606621-012

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Di-n-octyl phthalate	ND	9.9	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Dibenz(a,h)anthracene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Dibenzofuran	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
1,2-Dichlorobenzene	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
1,3-Dichlorobenzene	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
1,4-Dichlorobenzene	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
3,3'-Dichlorobenzidine	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Diethyl phthalate	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Dimethyl phthalate	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,4-Dichlorophenol	ND	12	100	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,4-Dimethylphenol	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
4,6-Dinitro-2-methylphenol	ND	9.0	100	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,4-Dinitrophenol	ND	14	100	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,4-Dinitrotoluene	ND	16	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,6-Dinitrotoluene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Fluoranthene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Fluorene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Hexachlorobenzene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Hexachlorobutadiene	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Hexachlorocyclopentadiene	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Hexachloroethane	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Indeno(1,2,3-cd)pyrene	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Isophorone	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
1-Methylnaphthalene	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2-Methylnaphthalene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2-Methylphenol	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
3+4-Methylphenol	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
N-Nitrosodi-n-propylamine	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
N-Nitrosodimethylamine	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
N-Nitrosodiphenylamine	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Naphthalene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2-Nitroaniline	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
3-Nitroaniline	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
4-Nitroaniline	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Nitrobenzene	ND	14	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2-Nitrophenol	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
4-Nitrophenol	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Pentachlorophenol	ND	12	100	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Phenanthrene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862

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Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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	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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:46:00 PM

Lab ID: 1606621-012

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Phenol	ND	9.9	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Pyrene	ND	15	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Pyridine	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
1,2,4-Trichlorobenzene	ND	13	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,4,5-Trichlorophenol	ND	11	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
2,4,6-Trichlorophenol	ND	12	50	D	µg/L	1	6/21/2016 6:28:29 AM	25862
Surr: 2-Fluorophenol	76.2	0	15-123	D	%Rec	1	6/21/2016 6:28:29 AM	25862
Surr: Phenol-d5	57.5	0	4.13-124	D	%Rec	1	6/21/2016 6:28:29 AM	25862
Surr: 2,4,6-Tribromophenol	65.9	0	18.4-134	D	%Rec	1	6/21/2016 6:28:29 AM	25862
Surr: Nitrobenzene-d5	106	0	28.8-134	D	%Rec	1	6/21/2016 6:28:29 AM	25862
Surr: 2-Fluorobiphenyl	92.1	0	35.9-125	D	%Rec	1	6/21/2016 6:28:29 AM	25862
Surr: 4-Terphenyl-d14	118	0	15-146	D	%Rec	1	6/21/2016 6:28:29 AM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Toluene	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Naphthalene	ND	0.093	2.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Acetone	ND	4.9	10		µg/L	1	6/21/2016 4:35:00 PM	R35071
Bromobenzene	ND	0.098	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Bromoform	ND	0.10	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Bromomethane	ND	0.78	3.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
2-Butanone	ND	0.74	10		µg/L	1	6/21/2016 4:35:00 PM	R35071
Carbon disulfide	ND	0.60	10		µg/L	1	6/21/2016 4:35:00 PM	R35071
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Chloroethane	ND	0.19	2.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Chloroform	ND	0.089	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Chloromethane	ND	0.21	3.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071

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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	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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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:46:00 PM

Lab ID: 1606621-012

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Dibromomethane	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
2-Hexanone	ND	0.84	10		µg/L	1	6/21/2016 4:35:00 PM	R35071
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/21/2016 4:35:00 PM	R35071
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Styrene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/21/2016 4:35:00 PM	R35071
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/21/2016 4:35:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-42

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 3:46:00 PM

Lab ID: 1606621-012

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 1,2-Dichloroethane-d4	78.9	0	70-130		%Rec	1	6/21/2016 4:35:00 PM	R35071
Surr: 4-Bromofluorobenzene	115	0	70-130		%Rec	1	6/21/2016 4:35:00 PM	R35071
Surr: Dibromofluoromethane	91.7	0	70-130		%Rec	1	6/21/2016 4:35:00 PM	R35071
Surr: Toluene-d8	105	0	70-130		%Rec	1	6/21/2016 4:35:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-013

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 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	6/14/2016 1:20:41 AM	25809
Motor Oil Range Organics (MRO)	ND	5.0	5.0		mg/L	1	6/14/2016 1:20:41 AM	25809
Surr: DNOP	112	0	70-141		%Rec	1	6/14/2016 1:20:41 AM	25809
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB	
Gasoline Range Organics (GRO)	ND	0.025	0.050		mg/L	1	6/16/2016 4:49:23 PM	B34963
Surr: BFB	114	0	66.4-120		%Rec	1	6/16/2016 4:49:23 PM	B34963
EPA METHOD 300.0: ANIONS							Analyst: LGT	
Fluoride	ND	0.45	2.0		mg/L	20	6/13/2016 11:45:38 PM	R34886
Chloride	15000	55	1000		mg/L	2000	6/30/2016 4:35:07 AM	B35338
Bromide	20	0.65	2.0		mg/L	20	6/13/2016 11:45:38 PM	R34886
Phosphorus, Orthophosphate (As P)	ND	4.4	10	H	mg/L	20	6/13/2016 11:45:38 PM	R34886
Sulfate	1300	280	1000		mg/L	2000	6/30/2016 4:35:07 AM	B35338
Nitrate+Nitrite as N	ND	4.6	10		mg/L	50	6/30/2016 5:47:13 PM	R35376
EPA METHOD 200.7: DISSOLVED METALS							Analyst: ELS	
Barium	0.065	0.0013	0.0020		mg/L	1	6/24/2016 3:40:34 PM	E35153
Cadmium	ND	0.00075	0.0020		mg/L	1	6/24/2016 3:40:34 PM	E35153
Calcium	3100	26	100		mg/L	100	6/28/2016 4:55:18 PM	A35265
Chromium	ND	0.0018	0.0060		mg/L	1	6/24/2016 3:40:34 PM	E35153
Copper	ND	0.0040	0.0060		mg/L	1	6/24/2016 3:40:34 PM	E35153
Iron	0.11	0.0091	0.020		mg/L	1	6/24/2016 3:40:34 PM	E35153
Magnesium	480	0.065	5.0		mg/L	5	6/24/2016 3:42:42 PM	E35153
Manganese	20	0.032	0.20	*	mg/L	100	6/28/2016 4:55:18 PM	A35265
Potassium	9.8	0.18	1.0		mg/L	1	6/24/2016 3:40:34 PM	E35153
Silver	ND	0.0028	0.0050		mg/L	1	6/24/2016 3:40:34 PM	E35153
Sodium	6400	9.6	100		mg/L	100	6/28/2016 4:55:18 PM	A35265
Zinc	0.0073	0.0028	0.010	J	mg/L	1	6/24/2016 3:40:34 PM	E35153
EPA METHOD 200.7: TOTAL METALS							Analyst: ELS	
Barium	0.24	0.0011	0.0020		mg/L	1	6/24/2016 5:04:39 PM	25917
Cadmium	ND	0.00062	0.0020		mg/L	1	6/24/2016 5:04:39 PM	25917
Chromium	ND	0.0022	0.0060		mg/L	1	6/24/2016 5:04:39 PM	25917
Copper	ND	0.0051	0.0060		mg/L	1	6/24/2016 5:04:39 PM	25917
Iron	7.9	0.072	0.20	*	mg/L	10	6/24/2016 5:06:38 PM	25917
Manganese	19	0.076	0.10	*	mg/L	50	6/24/2016 5:08:38 PM	25917
Silver	ND	0.0021	0.0050		mg/L	1	6/24/2016 5:04:39 PM	25917
Zinc	0.027	0.0039	0.010		mg/L	1	6/24/2016 5:04:39 PM	25917
EPA 200.8: DISSOLVED METALS							Analyst: JLF	
Arsenic	0.027	0.0069	0.050	J*	mg/L	50	7/6/2016 7:29:17 PM	B35457

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-013

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS								
							Analyst: JLF	
Lead	ND	0.0017	0.0050		mg/L	10	7/6/2016 7:23:10 PM	B35457
Selenium	0.091	0.011	0.050	*	mg/L	50	7/6/2016 7:29:17 PM	B35457
Uranium	0.27	0.0010	0.010	*	mg/L	20	7/6/2016 7:26:13 PM	B35457
200.8 ICPMS METALS:TOTAL								
							Analyst: JLF	
Arsenic	ND	0.029	0.10		mg/L	100	6/27/2016 8:39:25 PM	25917
Lead	0.0098	0.00024	0.0025		mg/L	5	6/27/2016 8:33:24 PM	25917
Selenium	ND	0.10	0.10		mg/L	100	6/27/2016 8:39:25 PM	25917
Uranium	0.26	0.00049	0.050	*	mg/L	100	6/27/2016 8:39:25 PM	25917
EPA METHOD 245.1: MERCURY								
							Analyst: pmf	
Mercury	0.00013	0.000053	0.00020	J	mg/L	1	6/24/2016 11:02:03 AM	26032
EPA METHOD 8270C: SEMIVOLATILES								
							Analyst: JDC	
Acenaphthene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Acenaphthylene	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Aniline	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Anthracene	ND	2.5	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Azobenzene	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Benz(a)anthracene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Benzo(a)pyrene	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Benzo(b)fluoranthene	ND	2.9	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Benzo(g,h,i)perylene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Benzo(k)fluoranthene	ND	3.0	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Benzoic acid	ND	2.6	20		µg/L	1	6/21/2016 1:29:43 PM	25862
Benzyl alcohol	ND	3.0	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Bis(2-chloroethoxy)methane	ND	2.8	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Bis(2-chloroethyl)ether	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Bis(2-chloroisopropyl)ether	ND	1.9	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Bis(2-ethylhexyl)phthalate	4.0	2.6	10	J	µg/L	1	6/21/2016 1:29:43 PM	25862
4-Bromophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Butyl benzyl phthalate	ND	2.5	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Carbazole	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
4-Chloro-3-methylphenol	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
4-Chloroaniline	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2-Chloronaphthalene	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2-Chlorophenol	ND	2.2	10		µg/L	1	6/21/2016 1:29:43 PM	25862
4-Chlorophenyl phenyl ether	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Chrysene	ND	2.8	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Di-n-butyl phthalate	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Di-n-octyl phthalate	5.6	2.0	10	J	µg/L	1	6/21/2016 1:29:43 PM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-013

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Dibenz(a,h)anthracene	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Dibenzofuran	ND	2.5	10		µg/L	1	6/21/2016 1:29:43 PM	25862
1,2-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
1,3-Dichlorobenzene	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
1,4-Dichlorobenzene	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
3,3'-Dichlorobenzidine	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Diethyl phthalate	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Dimethyl phthalate	3.0	2.4	10	J	µg/L	1	6/21/2016 1:29:43 PM	25862
2,4-Dichlorophenol	ND	2.3	20		µg/L	1	6/21/2016 1:29:43 PM	25862
2,4-Dimethylphenol	ND	3.0	10		µg/L	1	6/21/2016 1:29:43 PM	25862
4,6-Dinitro-2-methylphenol	ND	1.8	20		µg/L	1	6/21/2016 1:29:43 PM	25862
2,4-Dinitrophenol	ND	2.8	20		µg/L	1	6/21/2016 1:29:43 PM	25862
2,4-Dinitrotoluene	ND	3.1	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2,6-Dinitrotoluene	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Fluoranthene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Fluorene	ND	2.7	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Hexachlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Hexachlorobutadiene	ND	2.2	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Hexachlorocyclopentadiene	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Hexachloroethane	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Indeno(1,2,3-cd)pyrene	ND	3.0	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Isophorone	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
1-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2-Methylnaphthalene	ND	2.9	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2-Methylphenol	ND	2.5	10		µg/L	1	6/21/2016 1:29:43 PM	25862
3+4-Methylphenol	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
N-Nitrosodi-n-propylamine	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
N-Nitrosodimethylamine	ND	2.2	10		µg/L	1	6/21/2016 1:29:43 PM	25862
N-Nitrosodiphenylamine	ND	2.3	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Naphthalene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2-Nitroaniline	ND	2.8	10		µg/L	1	6/21/2016 1:29:43 PM	25862
3-Nitroaniline	ND	2.9	10		µg/L	1	6/21/2016 1:29:43 PM	25862
4-Nitroaniline	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Nitrobenzene	ND	2.8	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2-Nitrophenol	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
4-Nitrophenol	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Pentachlorophenol	ND	2.3	20		µg/L	1	6/21/2016 1:29:43 PM	25862
Phenanthrene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Phenol	ND	2.0	10		µg/L	1	6/21/2016 1:29:43 PM	25862

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-013

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8270C: SEMIVOLATILES							Analyst: JDC	
Pyrene	ND	3.1	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Pyridine	ND	2.2	10		µg/L	1	6/21/2016 1:29:43 PM	25862
1,2,4-Trichlorobenzene	ND	2.6	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2,4,5-Trichlorophenol	ND	2.2	10		µg/L	1	6/21/2016 1:29:43 PM	25862
2,4,6-Trichlorophenol	ND	2.4	10		µg/L	1	6/21/2016 1:29:43 PM	25862
Surr: 2-Fluorophenol	19.4	0	15-123		%Rec	1	6/21/2016 1:29:43 PM	25862
Surr: Phenol-d5	20.4	0	4.13-124		%Rec	1	6/21/2016 1:29:43 PM	25862
Surr: 2,4,6-Tribromophenol	22.6	0	18.4-134		%Rec	1	6/21/2016 1:29:43 PM	25862
Surr: Nitrobenzene-d5	92.5	0	28.8-134		%Rec	1	6/21/2016 1:29:43 PM	25862
Surr: 2-Fluorobiphenyl	84.5	0	35.9-125		%Rec	1	6/21/2016 1:29:43 PM	25862
Surr: 4-Terphenyl-d14	116	0	15-146		%Rec	1	6/21/2016 1:29:43 PM	25862
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Benzene	ND	0.096	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Toluene	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Ethylbenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Methyl tert-butyl ether (MTBE)	ND	0.21	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2,4-Trimethylbenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,3,5-Trimethylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2-Dichloroethane (EDC)	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2-Dibromoethane (EDB)	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Naphthalene	ND	0.093	2.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1-Methylnaphthalene	ND	0.20	4.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
2-Methylnaphthalene	ND	0.16	4.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Acetone	ND	4.9	10		µg/L	1	6/21/2016 4:59:00 PM	R35071
Bromobenzene	ND	0.098	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Bromodichloromethane	ND	0.14	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Bromoform	ND	0.10	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Bromomethane	ND	0.78	3.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
2-Butanone	ND	0.74	10		µg/L	1	6/21/2016 4:59:00 PM	R35071
Carbon disulfide	ND	0.60	10		µg/L	1	6/21/2016 4:59:00 PM	R35071
Carbon Tetrachloride	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Chlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Chloroethane	ND	0.19	2.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Chloroform	ND	0.089	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Chloromethane	ND	0.21	3.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
2-Chlorotoluene	ND	0.40	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
4-Chlorotoluene	ND	0.13	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
cis-1,2-DCE	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
cis-1,3-Dichloropropene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-013

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
1,2-Dibromo-3-chloropropane	ND	0.23	2.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Dibromochloromethane	ND	0.087	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Dibromomethane	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2-Dichlorobenzene	ND	0.40	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,3-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,4-Dichlorobenzene	ND	0.14	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Dichlorodifluoromethane	ND	0.36	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1-Dichloroethane	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1-Dichloroethene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2-Dichloropropane	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,3-Dichloropropane	ND	0.16	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
2,2-Dichloropropane	ND	0.17	2.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1-Dichloropropene	ND	0.13	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Hexachlorobutadiene	ND	0.20	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
2-Hexanone	ND	0.84	10		µg/L	1	6/21/2016 4:59:00 PM	R35071
Isopropylbenzene	ND	0.10	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
4-Isopropyltoluene	ND	0.14	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
4-Methyl-2-pentanone	ND	0.43	10		µg/L	1	6/21/2016 4:59:00 PM	R35071
Methylene Chloride	ND	0.19	3.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
n-Butylbenzene	ND	0.16	3.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
n-Propylbenzene	ND	0.13	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
sec-Butylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Styrene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
tert-Butylbenzene	ND	0.12	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1,1,2-Tetrachloroethane	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1,2,2-Tetrachloroethane	ND	0.13	2.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Tetrachloroethene (PCE)	ND	0.15	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
trans-1,2-DCE	ND	0.40	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
trans-1,3-Dichloropropene	ND	0.10	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2,3-Trichlorobenzene	ND	0.11	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2,4-Trichlorobenzene	ND	0.13	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1,1-Trichloroethane	ND	0.091	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,1,2-Trichloroethane	ND	0.13	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Trichloroethene (TCE)	ND	0.18	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Trichlorofluoromethane	ND	0.20	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
1,2,3-Trichloropropane	ND	0.20	2.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Vinyl chloride	ND	0.20	1.0		µg/L	1	6/21/2016 4:59:00 PM	R35071
Xylenes, Total	ND	0.37	1.5		µg/L	1	6/21/2016 4:59:00 PM	R35071
Surr: 1,2-Dichloroethane-d4	91.9	0	70-130		%Rec	1	6/21/2016 4:59:00 PM	R35071

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 1606621

Date Reported: 7/27/2016

CLIENT: Western Refining Southwest, Gallup

Client Sample ID: MKTF-43

Project: 2016 2ND QTR (MKTF)

Collection Date: 6/9/2016 2:20:00 PM

Lab ID: 1606621-013

Matrix: AQUEOUS

Received Date: 6/10/2016 3:35:00 PM

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8260B: VOLATILES							Analyst: BCN	
Surr: 4-Bromofluorobenzene	99.8	0	70-130		%Rec	1	6/21/2016 4:59:00 PM	R35071
Surr: Dibromofluoromethane	96.6	0	70-130		%Rec	1	6/21/2016 4:59:00 PM	R35071
Surr: Toluene-d8	96.9	0	70-130		%Rec	1	6/21/2016 4:59:00 PM	R35071

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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	MB-D		SampType:	MBLK		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	PBW		Batch ID:	D35153		RunNo:	35153			
Prep Date:			Analysis Date:	6/24/2016		SeqNo:	1088479	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								
Zinc	ND	0.010								

Sample ID	LCS-D		SampType:	LCS		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	LCSW		Batch ID:	D35153		RunNo:	35153			
Prep Date:			Analysis Date:	6/24/2016		SeqNo:	1088480	Units:	mg/L	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	101	85	115			
Cadmium	0.51	0.0020	0.5000	0	102	85	115			
Calcium	51	1.0	50.00	0	102	85	115			
Chromium	0.50	0.0060	0.5000	0	99.5	85	115			
Copper	0.50	0.0060	0.5000	0	99.1	85	115			
Iron	0.48	0.020	0.5000	0	96.3	85	115			
Magnesium	52	1.0	50.00	0	104	85	115			
Manganese	0.49	0.0020	0.5000	0	98.9	85	115			
Potassium	50	1.0	50.00	0	99.1	85	115			
Silver	0.10	0.0050	0.1000	0	101	85	115			
Zinc	0.49	0.010	0.5000	0	99.0	85	115			

Sample ID	LLCS-D		SampType:	LCSLL		TestCode:	EPA Method 200.7: Dissolved Metals			
Client ID:	BatchQC		Batch ID:	D35153		RunNo:	35153			
Prep Date:			Analysis Date:	6/24/2016		SeqNo:	1088481	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			
Calcium	0.58	1.0	0.5000	0	116	50	150			J
Chromium	0.0073	0.0060	0.006000	0	121	50	150			
Copper	0.0061	0.0060	0.006000	0	102	50	150			
Iron	0.020	0.020	0.02000	0	101	50	150			

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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	LLLCS-D		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: D35153		RunNo: 35153					
Prep Date:			Analysis Date: 6/24/2016		SeqNo: 1088481		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	0.54	1.0	0.5000	0	109	50	150			J
Manganese	0.0020	0.0020	0.002000	0	102	50	150			
Potassium	0.50	1.0	0.5000	0	100	50	150			J
Silver	0.0041	0.0050	0.005000	0	82.8	50	150			J
Zinc	0.0060	0.010	0.005000	0	119	50	150			J

Sample ID	MB-E	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: E35153			RunNo: 35153					
Prep Date:		Analysis Date: 6/24/2016			SeqNo: 1088482		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Copper	ND	0.0060								
Iron	ND	0.020								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID	LCS-E		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: E35153		RunNo: 35153					
Prep Date:			Analysis Date: 6/24/2016		SeqNo: 1088483		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.0020	0.5000	0	101	85	115			
Cadmium	0.51	0.0020	0.5000	0	103	85	115			
Chromium	0.50	0.0060	0.5000	0	101	85	115			
Copper	0.49	0.0060	0.5000	0	98.8	85	115			
Iron	0.48	0.020	0.5000	0	96.1	85	115			
Magnesium	52	1.0	50.00	0	105	85	115			
Potassium	50	1.0	50.00	0	99.8	85	115			
Silver	0.10	0.0050	0.1000	0	102	85	115			
Zinc	0.50	0.010	0.5000	0	99.8	85	115			

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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	LLLCS-E		SampType: LCSLL		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC		Batch ID: E35153		RunNo: 35153					
Prep Date:			Analysis Date: 6/24/2016		SeqNo: 1088484		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	81.5	50	150			J
Cadmium	0.0019	0.0020	0.002000	0	96.5	50	150			J
Chromium	0.0052	0.0060	0.006000	0	87.0	50	150			J
Copper	0.0055	0.0060	0.006000	0	91.7	50	150			J
Iron	0.020	0.020	0.02000	0	97.6	50	150			J
Magnesium	0.53	1.0	0.5000	0	107	50	150			J
Potassium	0.44	1.0	0.5000	0	88.3	50	150			J
Silver	0.0045	0.0050	0.005000	0	89.2	50	150			J
Zinc	0.0060	0.010	0.005000	0	120	50	150			J

Sample ID	MB-A	SampType: MBLK			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	PBW	Batch ID: A35265			RunNo: 35265					
Prep Date:		Analysis Date: 6/28/2016			SeqNo: 1090634		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Manganese	ND	0.0020								
Sodium	ND	1.0								

Sample ID	LCS-A		SampType: LCS		TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	LCSW		Batch ID: A35265		RunNo: 35265					
Prep Date:			Analysis Date: 6/28/2016		SeqNo: 1090635		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	99.0	85	115			
Manganese	0.48	0.0020	0.5000	0	95.3	85	115			
Sodium	50	1.0	50.00	0	99.0	85	115			

Sample ID	LLLCS-A	SampType: LCSLL			TestCode: EPA Method 200.7: Dissolved Metals					
Client ID:	BatchQC	Batch ID: A35265			RunNo: 35265					
Prep Date:		Analysis Date: 6/28/2016			SeqNo: 1090636		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.52	1.0	0.5000	0	103	50	150			J
Manganese	0.0020	0.0020	0.002000	0	98.0	50	150			J
Sodium	0.52	1.0	0.5000	0	104	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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	MB-25917		SampType: MBLK		TestCode: EPA Method 200.7: Total Metals					
Client ID:	PBW		Batch ID: 25917		RunNo: 35031					
Prep Date:	6/17/2016		Analysis Date: 6/20/2016		SeqNo: 1082751		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-25917		SampType: LCS		TestCode: EPA Method 200.7: Total Metals					
Client ID:	LCSW		Batch ID: 25917		RunNo: 35031					
Prep Date:	6/17/2016		Analysis Date: 6/20/2016		SeqNo: 1082752		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.49	0.0020	0.5000	0	97.6	85	115			
Cadmium	0.50	0.0020	0.5000	0	101	85	115			
Chromium	0.49	0.0060	0.5000	0	97.8	85	115			
Copper	0.50	0.0060	0.5000	0	99.4	85	115			
Iron	0.47	0.020	0.5000	0	94.8	85	115			
Manganese	0.48	0.0020	0.5000	0	96.2	85	115			
Silver	0.10	0.0050	0.1000	0	103	85	115			
Zinc	0.49	0.010	0.5000	0	98.2	85	115			

Sample ID	LLLCS-25917		SampType: LCSLL		TestCode: EPA Method 200.7: Total Metals					
Client ID:	BatchQC		Batch ID: 25917		RunNo: 35031					
Prep Date:	6/17/2016		Analysis Date: 6/20/2016		SeqNo: 1082753		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.0022	0.0020	0.002000	0	109	50	150			
Cadmium	0.0020	0.0020	0.002000	0	100	50	150			
Chromium	0.0052	0.0060	0.006000	0	86.0	50	150			J
Copper	0.0058	0.0060	0.006000	0	96.8	50	150			J
Iron	0.021	0.020	0.02000	0	104	50	150			
Manganese	0.0022	0.0020	0.002000	0	110	50	150			
Silver	0.0050	0.0050	0.005000	0	101	50	150			
Zinc	0.0070	0.010	0.005000	0	140	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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	1606621-005FMSDL				SampType:	MSD			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	MKTF-31				Batch ID:	B35346			RunNo:	35346		
Prep Date:					Analysis Date:	6/29/2016			SeqNo:	1093393		
									Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Lead	0.013	0.00050	0.01250	0	102	70	130	0.628	20			

Sample ID	1606621-005FMSLL				SampType:	MS			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	MKTF-31				Batch ID:	B35346			RunNo:	35346		
Prep Date:					Analysis Date:	6/29/2016			SeqNo:	1093394		
									Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Lead	0.013	0.00050	0.01250	0	103	70	130					

Sample ID	LCS				SampType:	LCS			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	LCSW				Batch ID:	B35346			RunNo:	35346		
Prep Date:					Analysis Date:	6/29/2016			SeqNo:	1093450		
									Units:	mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Arsenic	0.025	0.0010	0.02500	0	98.7	85	115					
Lead	0.012	0.00050	0.01250	0	94.6	85	115					
Selenium	0.025	0.0010	0.02500	0	99.6	85	115					

Sample ID	LLLCS				SampType:	LCSLL			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	BatchQC				Batch ID:	B35346			RunNo:	35346		
Prep Date:					Analysis Date:	6/29/2016			SeqNo:	1093453		
									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	101	50	150					
Lead	0.00049	0.00050	0.0005000	0	97.8	50	150				J	
Selenium	0.00099	0.0010	0.001000	0	99.5	50	150				J	

Sample ID	MB				SampType:	MBLK			TestCode:	EPA 200.8: Dissolved Metals		
Client ID:	PBW				Batch ID:	B35346			RunNo:	35346		
Prep Date:					Analysis Date:	6/29/2016			SeqNo:	1093455		
									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										

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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID LCS	SampType: LCS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: LCSW	Batch ID: B35378			RunNo: 35378						
Prep Date:	Analysis Date: 6/30/2016			SeqNo: 1094537		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	95.4	85	115			
Selenium	0.024	0.0010	0.02500	0	96.2	85	115			
Uranium	0.012	0.00050	0.01250	0	95.9	85	115			

Sample ID LLCS	SampType: LCSLL			TestCode: EPA 200.8: Dissolved Metals						
Client ID: BatchQC	Batch ID: B35378			RunNo: 35378						
Prep Date:	Analysis Date: 6/30/2016			SeqNo: 1094539		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	93.2	50	150			J
Selenium	0.00088	0.0010	0.001000	0	88.2	50	150			J
Uranium	0.00048	0.00050	0.0005000	0	95.6	50	150			J

Sample ID MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals						
Client ID: PBW	Batch ID: B35378			RunNo: 35378						
Prep Date:	Analysis Date: 6/30/2016			SeqNo: 1094541		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID 1606621-005FMSDL	SampType: MSD			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-31	Batch ID: A35415			RunNo: 35415						
Prep Date:	Analysis Date: 7/1/2016			SeqNo: 1095821		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.004253	100	70	130	0.948	20	
Selenium	0.13	0.0050	0.1250	0.01354	94.7	70	130	0.497	20	
Uranium	0.11	0.0025	0.06250	0.04624	106	70	130	0.372	20	

Sample ID 1606621-005FMSLL	SampType: MS			TestCode: EPA 200.8: Dissolved Metals						
Client ID: MKTF-31	Batch ID: A35415			RunNo: 35415						
Prep Date:	Analysis Date: 7/1/2016			SeqNo: 1095822		Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.13	0.0050	0.1250	0.004253	101	70	130			
Selenium	0.13	0.0050	0.1250	0.01354	94.2	70	130			
Uranium	0.11	0.0025	0.06250	0.04624	107	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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: A35415				RunNo: 35415					
Prep Date:	Analysis Date: 7/1/2016				SeqNo: 1095863		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	97.8	85	115			
Lead	0.012	0.00050	0.01250	0	98.5	85	115			
Selenium	0.024	0.0010	0.02500	0	96.2	85	115			
Uranium	0.012	0.00050	0.01250	0	98.4	85	115			

Sample ID LCS	SampType: LCS				TestCode: EPA 200.8: Dissolved Metals					
Client ID: LCSW	Batch ID: C35415				RunNo: 35415					
Prep Date:	Analysis Date: 7/1/2016				SeqNo: 1095864		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.024	0.0010	0.02500	0	96.0	85	115			
Lead	0.012	0.00050	0.01250	0	98.9	85	115			
Selenium	0.024	0.0010	0.02500	0	97.7	85	115			
Uranium	0.012	0.00050	0.01250	0	98.9	85	115			

Sample ID LLCS	SampType: LCSLL				TestCode: EPA 200.8: Dissolved Metals					
Client ID: BatchQC	Batch ID: A35415				RunNo: 35415					
Prep Date:	Analysis Date: 7/1/2016				SeqNo: 1095865		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00097	0.0010	0.001000	0	96.7	50	150			J
Lead	0.00051	0.00050	0.0005000	0	102	50	150			
Selenium	0.00097	0.0010	0.001000	0	97.4	50	150			J
Uranium	0.00049	0.00050	0.0005000	0	97.9	50	150			J

Sample ID LLCS	SampType: LCSLL				TestCode: EPA 200.8: Dissolved Metals					
Client ID: BatchQC	Batch ID: C35415				RunNo: 35415					
Prep Date:	Analysis Date: 7/1/2016				SeqNo: 1095866		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00096	0.0010	0.001000	0	95.9	50	150			J
Lead	0.00050	0.00050	0.0005000	0	101	50	150			
Selenium	0.00099	0.0010	0.001000	0	98.6	50	150			J
Uranium	0.00049	0.00050	0.0005000	0	98.3	50	150			J

Sample ID MB	SampType: MBLK				TestCode: EPA 200.8: Dissolved Metals					
Client ID: PBW	Batch ID: A35415				RunNo: 35415					
Prep Date:	Analysis Date: 7/1/2016				SeqNo: 1095867		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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: A35415			RunNo: 35415					
Prep Date:		Analysis Date: 7/1/2016			SeqNo: 1095867		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	MB	SampType: MBLK			TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID: C35415			RunNo: 35415					
Prep Date:		Analysis Date: 7/1/2016			SeqNo: 1095868		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	LCS		SampType: LCS		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	LCSW		Batch ID: B35457		RunNo: 35457					
Prep Date:			Analysis Date: 7/6/2016		SeqNo: 1098043		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	93.7	85	115			
Lead	0.012	0.00050	0.01250	0	93.2	85	115			
Selenium	0.024	0.0010	0.02500	0	95.1	85	115			
Uranium	0.012	0.00050	0.01250	0	93.1	85	115			

Sample ID	LLLCS			SampType:	LCSLL			TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	BatchQC			Batch ID:	B35457			RunNo:	35457					
Prep Date:				Analysis Date:	7/6/2016			SeqNo:	1098045			Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Arsenic	0.00098	0.0010	0.001000	0	97.8	50	150			J				
Lead	0.00047	0.00050	0.0005000	0	94.6	50	150			J				
Selenium	0.0011	0.0010	0.001000	0	109	50	150							
Uranium	0.00046	0.00050	0.0005000	0	92.3	50	150			J				

Sample ID	MB		SampType: MBLK		TestCode: EPA 200.8: Dissolved Metals					
Client ID:	PBW		Batch ID: B35457		RunNo: 35457					
Prep Date:			Analysis Date: 7/6/2016		SeqNo: 1098047		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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	MB	SampType:	MBLK	TestCode:	EPA 200.8: Dissolved Metals					
Client ID:	PBW	Batch ID:	B35457	RunNo:	35457					
Prep Date:		Analysis Date:	7/6/2016	SeqNo:	1098047	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								

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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	MB-25917		SampType:	MBLK		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	PBW		Batch ID:	25917		RunNo:	35081			
Prep Date:	6/17/2016		Analysis Date:	6/21/2016		SeqNo:	1084975	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	0.0000065	0.00050								J

Sample ID	MSLCS-25917		SampType:	LCS		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	LCSW		Batch ID:	25917		RunNo:	35081			
Prep Date:	6/17/2016		Analysis Date:	6/21/2016		SeqNo:	1084979	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	99.6	85	115			
Lead	0.013	0.00050	0.01250	0	100	85	115			
Selenium	0.024	0.0010	0.02500	0	96.3	85	115			
Uranium	0.013	0.00050	0.01250	0	100	85	115			

Sample ID	MSLLLCS-25917		SampType:	LCSLL		TestCode:	200.8 ICPMS Metals:Total			
Client ID:	BatchQC		Batch ID:	25917		RunNo:	35081			
Prep Date:	6/17/2016		Analysis Date:	6/21/2016		SeqNo:	1084983	Units:	mg/L	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0013	0.0010	0.001000	0	128	50	150			
Lead	0.00052	0.00050	0.0005000	0	104	50	150			
Selenium	0.0010	0.0010	0.001000	0	101	50	150			
Uranium	0.00051	0.00050	0.0005000	0	102	50	150			

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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID	MB-26032	SampType:	MBLK	TestCode:	EPA Method 245.1: Mercury					
Client ID:	PBW	Batch ID:	26032	RunNo:	35154					
Prep Date:	6/23/2016	Analysis Date:	6/24/2016	SeqNo:	1087478	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.000072	0.00020								J

Sample ID	LCS-26032	SampType:	LCS	TestCode:	EPA Method 245.1: Mercury					
Client ID:	LCSW	Batch ID:	26032	RunNo:	35154					
Prep Date:	6/23/2016	Analysis Date:	6/24/2016	SeqNo:	1087479	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.5	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#: 1606621

27-Jul-16

Client: Western Refining Southwest, Gallup

Project: 2016 2ND QTR (MKTF)

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R34886		RunNo: 34886							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1077544		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	0.11	0.50								J
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	0.072	0.50								J
Nitrate+Nitrite as N	ND	0.20								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: R34886		RunNo: 34886							
Prep Date:	Analysis Date: 6/13/2016		SeqNo: 1077545		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.52	0.10	0.5000	0	104	90	110			
Chloride	4.8	0.50	5.000	0	95.8	90	110			
Bromide	2.5	0.10	2.500	0	98.6	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	97.0	90	110			
Sulfate	9.7	0.50	10.00	0	97.4	90	110			
Nitrate+Nitrite as N	3.5	0.20	3.500	0	99.7	90	110			

Sample ID MB	SampType: MBLK		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: B35338		RunNo: 35338							
Prep Date:	Analysis Date: 6/30/2016		SeqNo: 1093268		Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID LCS	SampType: LCS		TestCode: EPA Method 300.0: Anions							
Client ID: LCSW	Batch ID: B35338		RunNo: 35338							
Prep Date:	Analysis Date: 6/30/2016		SeqNo: 1093269		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			
Sulfate	9.9	0.50	10.00	0	98.5	90	110			

Sample ID MB	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBW	Batch ID: R35376		RunNo: 35376							
Prep Date:	Analysis Date: 6/30/2016		SeqNo: 1094336		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 |